

**KONYA FOOD AND AGRICULTURE UNIVERSITY  
GRADUATE SCHOOL OF SOCIAL SCIENCES  
DEPARTMENT OF INTERNATIONAL TRADE AND  
MANAGEMENT**

**EVALUATING EMERGENCY PREPAREDNESS OF  
SMALL AND MEDIUM-SIZED ENTERPRISES, KONYA**

**MASTER OF ARTS THESIS**

**Şeyda BAFRA**

**KONYA  
OCTOBER, 2022**











**KONYA FOOD AND AGRICULTURE UNIVERSITY**

**GRADUATE SCHOOL OF SOCIAL SCIENCES**

**MASTER OF ARTS THESIS**

**EVALUATING EMERGENCY PREPAREDNESS OF SMALL AND  
MEDIUM-SIZED ENTERPRISES, KONYA**

**Şeyda BAFRA**

**Supervisor:** Asst. Prof. Dr. Faruk KARAMAN

**Department of International Trade and Management**

**Meram-KONYA**

**OCTOBER, 2022**



This study titled **“Evaluating Emergency Preparedness of Small and Medium-Sized Enterprises, Konya”** prepared by Ş\*\*\*a B\*\*\*A has been accepted with consensus by the following jury on 19/10/2022 as a **Master of Arts Thesis** in the Department of International Trade and Management.

Supervisor : Asst. Prof. Dr. F\*\*\*k K\*\*\*\*\*N

Konya Food and Agriculture University

Jury Chair : Prof. Dr. Y\*\*\*z G\*\*\*\*\*Y

Bahcesehir University

Jury Member : Asst. Prof. Dr. L\*\*\*\*\*t A\*\*\*Y

Konya Food and Agriculture University

I certify that this thesis which has been accepted by the jury satisfies all the requirements as a thesis for the degree of Master of Arts.

Assoc. Prof. Dr. B\*\*i R\*\*a B\*\*\*I

Acting Head of Department

Approval of the Graduate School of Social Sciences

Asst. Prof. Dr. L\*\*\*\*\*t A\*\*\*Y

Director







## ABSTRACT

### EVALUATING EMERGENCY PREPAREDNESS OF SMALL AND MEDIUM-SIZED ENTERPRISES, KONYA

B\*\*\*A, Ş\*\*\*a

Master of Arts Thesis, Department of International Trade and Management

Supervisor: Asst. Prof. Dr. F\*\*\*k K\*\*\*\*\*N

October 2022, 75 pages

Today's business world operates in an extremely complex environment. At any moment, it may face situations that can lead to critical consequences, namely opportunities and threats. Businesses must be able to successfully and effectively manage these critical situations so that their operations are not severely disrupted. Most businesses have the bad habit that while they do good work, they will continue to do so. Businesses need to eliminate this laziness and be prepared for possible bad days. Here, crisis management is the process of realizing the goals of the manager in the best way in possibly dangerous situations. Good crisis management means a good understanding of risk management.

Crisis-risk management holistic is a complex and urgent process that is seen as a minor problem or not considered by business managers before the crisis occurs but puts the targets, strategies, personnel, and even employees in danger as in all operations after the crisis.

It gives some signals before a crisis occurs, and if these signals are perceived and evaluated correctly, necessary precautions can be taken against possible crises with good risk management. Or at least the impact of the crisis can be reduced.

This study aims to find answers to whether SMEs operating in Konya are carrying out a study to institutionalize risk management in the face of both national and international crises that have arisen and become chronic, and if they do, what they do.

**Key Words:** Emergency Management, SME, Small and Medium Sized Enterprise, Konya



## ÖZET

# KONYA’DA YERLEŞİK KÜÇÜK VE ORTA ÖLÇEKLİ İŞLETMELERİN ACİL DURUMLARA HAZIRLIKLARININ DEĞERLENDİRİLMESİ

B\*\*\*A, Ş\*\*\*a

Yüksek Lisans Tezi, Uluslararası Ticaret ve İşletmecilik Anabilim Dalı  
Danışman: Dr. Öğr. Üyesi F\*\*\*k K\*\*\*\*\*N  
Ekim 2022, 75 sayfa

Günümüzün iş dünyası son derece karmaşık bir ortamda faaliyet göstermektedir. Her an kritik sonuçlara yol açabilecek durumlarla yani fırsat ve tehditlerle karşı karşıya kalabilir. İşletmeler, operasyonlarının ciddi şekilde kesintiye uğramaması için bu kritik durumları başarılı ve etkili bir şekilde yönetebilmelidir. İşletmelerin çoğunluğu, iyi işler yaparken, bunu yapmaya devam edecekleri gibi kötü bir alışkanlığa sahiptir. İşletmelerin bu tembellikten kurtulmaları ve olası kötü günlere karşı her zaman hazırlıklı olmaları gerekmektedir. Burada kriz yönetimi, olası tehlike durumlarında yöneticinin amaçlarını en iyi şekilde gerçekleştirme sürecidir. İyi bir kriz yönetimi demek iyi bir risk yönetimi anlayışı demektir.

Kriz oluşmadan önce işletme yöneticileri tarafından küçük bir sorun olarak görülen ya da hiç dikkate alınmayan, ancak kriz sonrasında tüm operasyonlarda olduğu gibi hedefleri, stratejileri, personeli hatta çalışanları tehlikeye atan karmaşık ve acil bir süreçtir kriz-risk yönetimi bütünseli.

Kriz oluşmadan önce bazı sinyaller verir, bu sinyaller doğru algılanır ve doğru değerlendirilirse iyi bir risk yönetimiyle olası krizlere karşı gerekli önlemler alınabilir. Ya da en azından krizin etkisi azaltılabilir.

Bu çalışmada, Konya’da faaliyet gösteren KOBİ’lerin ortaya çıkan ve kronikleşen hem ulusal hem de uluslararası krizler karşısında risk yönetimini kurumsallaştırmaya yönelik bir çalışma yürütüyorlar mı ve yapıyorlarsa, neler yaptıkları sorularına cevap bulunması amaçlanmaktadır.

**Anahtar Kelimeler:** Acil Durum Yönetimi, KOBİ, Küçük ve Orta Ölçekli İşletme, Konya



## ACKNOWLEDGEMENTS

Firstly, I would like to thank my kind supervisor **Asst. Prof. Dr. F\*\*\*k K\*\*\*\*\*N** who provided me with the opportunity to pursue my Master's thesis, always helped and supported me during my study period, and always devoted most of his time for me. I would also like to thank dear **Asst. Prof. Dr. L\*\*\*\*\*t A\*\*\*Y** for his academic and moral support since the beginning of my academic career. I would like to express my sincere regards in here.

I would like to the express my gratitude and respect to the Konya Chamber of Commerce Secretary General and IT Department for in delivering my surveys to SMEs in Konya.

I offer my most sincere love to my son A\*i İ\*\*\*R for his moral support and understanding.

Şeyda BAFRA

October, 2022



## TEXT OF OATH

The study I presented as my Master of Arts thesis titled “Evaluating Emergency Preparedness of Small and Medium-Sized Enterprises, Konya” has been written without applying to any assistance inconsistent with the scientific ethics and traditions, and all sources I have benefited from were listed in the bibliography and I have been used them by means of making references and I declare and confirm this with my honour.

Şeyda BAFRA  
October, 2022



# TABLE OF CONTENTS

	Page
<b>ABSTRACT .....</b>	<b>iii</b>
<b>ÖZET .....</b>	<b>iv</b>
<b>ACKNOWLEDGEMENTS .....</b>	<b>v</b>
<b>TEXT OF OATH .....</b>	<b>vi</b>
<b>TABLE OF CONTENTS .....</b>	<b>vii</b>
<b>LIST OF TABLES .....</b>	<b>xiv</b>
<b>1. INTRODUCTION .....</b>	<b>1</b>
<b>2. TERMINOLOGY, RISK CONCEPT, SCOPE, AND RESOURCES.....</b>	<b>13</b>
2.1. Emergency .....	13
2.2. Disaster .....	13
2.3. Characteristics of the Disaster.....	15
2.4. Factors Causing Disaster .....	16
2.5. Disaster Management .....	17
2.6. Phases of Disaster Management .....	18
2.7. Accreditation .....	19
2.8. Preparedness .....	19
2.9. Recovery .....	19
2.10. Intervention .....	19
2.11. Risk .....	19
2.12. Risk reduction .....	22
2.13. Risk management .....	22
2.14. Civil defense .....	22
2.15. Mitigation .....	22
2.16. Risk Governance .....	22
2.17. Crisis .....	22
2.18. Factors Bringing Crisis or Risk .....	24
2.18.1. External Factors .....	24
2.18.1.1. Natural Causes .....	24
2.18.1.2. Economic Reasons .....	25
2.18.1.3. Technological Reasons .....	25
2.18.1.4. Social and Cultural Reasons .....	25
2.18.1.5. Legal and Political Reasons.....	26



2.18.1.6. Reasons Originating from International Relations.....	26
2.18.2. Intra-Organizational Factors.....	26
2.18.2.1. Organizational Structure .....	27
2.18.2.2. Human Factor and Quality of Senior Management .....	27
2.18.2.3. Insufficient Data Collection and Evaluation .....	28
2.18.2.4. Problems Caused by Organizational Culture and Climate .....	28
2.18.2.5. Life Stages of Organizations and Organizational History .....	29
2.19. Stages of the crisis .....	31
2.19.1. Pre-crisis .....	31
2.19.1.1. Blindness .....	31
2.19.1.2. Failure to take action .....	31
2.19.1.3. Wrong action .....	32
2.19.2. Moment of crisis.....	32
2.19.3. Post crisis .....	33
2.20. Consequences of the Crisis .....	33
2.21. Definition of Crisis Management .....	33
2.22. Features of Crisis Management .....	35
2.23. Stages of Crisis Management .....	36
2.23.1. Crisis Preparedness .....	36
2.23.2. Reducing the Damages of the Crisis .....	36
2.23.3. Intervention .....	37
2.23.4. Improvement .....	37
2.24. Crisis and Risk Communication .....	38
2.24.1. Communication as a Technology Showcase .....	39
2.24.2. Communication in the Meaning of Inter-Organizational Network / Network Connection .....	40
2.24.3. Risk Communication.....	40
<b>3. AN APPLICATION ON THE ASSESSMENT OF EMERGENCY PREPARATIONS OF SMEs RESIDENT IN KONYA .....</b>	<b>52</b>
3.1. Purpose of the research .....	52
3.2. Scope and Limitation of the Research .....	52
3.3. Method Used in the Research .....	52
<b>4. RESULTS AND FINDINGS .....</b>	<b>56</b>



<b>5. DISCUSSION .....</b>	<b>62</b>
<b>REFERENCES .....</b>	<b>64</b>
<b>APPENDIX .....</b>	<b>68</b>
<b>CURRICULUM VITAE .....</b>	<b>75</b>





## LIST OF TABLES

Table	Page
Table.1: What do you understand by risk management?.....	53
Table.2: What do you understand by disaster management?.....	53
Table.3: What are the financial risks affecting your organization? .....	53
Table.4: What do you do to protect yourself from financial risks affecting your institution?.....	53
Table.5: What are the physical risks affecting your organization?.....	53
Table.6: What do you do to protect yourself from physical risks affecting your organization?.....	54
Table.7: What are the risks affecting the information of your organization?.	54
Table.8: What do you do to protect yourself from information risks affecting your organization?.....	54
Table.9: What are the risks affecting your employees?.....	55
Table.10: What do you do to protect yourself from risks affecting employees?	55
Table.11: Have you heard of the ISO 31000 standard? What work do you have on this subject?.....	63
Table.12: The answers, their averages, and their deviations.....	65
Table.13: The correlations.....	69



## 1. INTRODUCTION

Humanity has struggled with various epidemics, pandemics, and natural disasters throughout history since the time it started to live in communities and continues to do so. In the past, it has been very difficult to overcome many disasters such as epidemics, pandemics, and natural disasters, both at the global and regional levels, and even many people have lost their lives in these epidemics and disasters. However, during the epidemic periods, countries tried to develop several strategies, tactics, and methods within the scope of combating the epidemic. At this point, the struggles, measures, and measures taken sometimes made it possible to prevent the spread of epidemic diseases, and sometimes they were not effective enough. On the other hand, the struggles with epidemics, pandemics, and natural disasters, which deeply affect all parts of society in terms of mental and physical health, as well as social, cultural, and economic aspects, have been inherited today and have become accumulations that are used again in possible disaster situations for humanity. At this point, the struggles, measures, and measures taken sometimes made it possible to prevent the spread of epidemic diseases, and sometimes they were not effective enough. On the other hand, the struggles with epidemics, pandemics, and natural disasters, which deeply affect all parts of the society in terms of mental and physical health, as well as social, cultural, and economic aspects, have been inherited today and have become accumulations that are used again in possible disaster situations for humanity.

The struggles waged in traditional societies and modern societies have different characteristics. Especially in traditional societies where medicine and technology are not sufficiently developed, the struggles carried out within uncertain constraints have caused pandemics and epidemics to last longer. The modern society we live in today, on the other hand, is in several risks, unlike traditional societies (Beck, 2019). When we evaluate the modern society within the risk society approaches, the existing risks should also be discussed.

It is defined as natural, technological, or human-induced events that cause physical, economic, and social losses by negatively affecting both human existence and flora (plant existence) and fauna (animal existence) in all or a part of the society, stopping



or interrupting the functioning of normal life and human activities. Although earthquakes come to mind when disasters are concerned, in fact

- a) Earthquake, flood, storm, landslide, avalanche,
- b) Large population movements such as asylum and migration,
- c) Fires and accidents,
- d) Chemical, biological, radiological, and nuclear material accidents or incidents,
- e) Dangerous and epidemic diseases
- f) Terrorist acts

Natural, technological, and human-induced phenomena create a wide range of risks and threats. The requirements of integrated disaster management processes result in the public administration and society being constantly alert at every administrative level, starting from the local level.

Disaster events of different natures occur with the effect of technological, sociological, economic, political, and military changes as well as natural phenomena in the world, and they are increasingly diversified in terms of number and violence. In addition, people encounter new types of natural disasters in the regions they live in. Disaster news triggered by climate change has become the routine of the world.

Being able to manage disasters well in developed countries is seen as one of the most important prerequisites for sustainable development. Today, the changing dimension of disasters, the increase in the incidence of technological disasters, and the effectiveness of human-induced activities in the destructiveness of natural disasters have led to the necessity of reviewing the effectiveness of the effective strategy of disaster management. The relations between the development goals and integrated risk and crisis management need to be regulated.

Destructive disasters are one of the most important obstacles to sustainable development. Less developed countries are the group most affected by disaster damage. The concept of “Integrated Risk and Crisis Management” was developed and transferred to the acquis by the European Union, with the multiple participation of many different sectors and different levels of management and negotiation based on consensus culture, and governance philosophy is based. Due to the nature of the subject, stakeholders are brought together through the operation of participation



mechanisms by making use of social capital at local, national, and international levels in the global relations network, and a common synergy is created in the support of mutual information exchange. In this way, a public interest area is created, which strengthens awareness from the global to the local, due to the creation of ethical basic participatory principles, starting from the local level and opening to the global from time to time.

Parson's systems theory can be analyzed in a little more detail to make matters of institutions and functions transparent. As a result of the analysis of this theory, it is predicted that the place of organic solidarity, rationalization, division of labor, bureaucracy, and specialization in terms of integrated disaster management can be observed more clearly.

One of the representatives of the tradition of treating social life as an organism is Talcott Parsons. In Parsons' theory, society consists of various subsystems and the relationships that actors establish with each other within these systems (Parsons, 2007). In this system, which can also be expressed as (or gave rise to) a social structure, it is seen that each element is handled from a functionalist point of view. This perspective foresees the action of actors in line with social expectations and compensation in line with these expectations in case of any disharmony or disorder. The harmony that is tried to be caught is revealed with the concept of "tension management" in terms of maintaining integration in Parsons (Cited from Swingewood, 1998, Yildirim, 2020: 163). This concept, in its most general form, refers to meeting the functional demands that arise in society and to compensate for the possible conflict situation that these may cause by the system (Fidan, 2017: 270).

Parsons is the basic principle that guides the social actions of individuals in a social system explains reference points within the framework of social action theory. Accordingly, there are sub-components such as the organism, personality system, social system, and cultural system in which the individual is included (Baltacı, 2019: 6). In these components, there are functional patterns such as harmony, reaching the goal, integration and maintaining a pattern (Mayhew, 1982: 25). According to Parsons, these patterns become a necessity for the existence and continuity of the system with the precondition of "meeting their needs" (Layder, 2008: 42). The main motivation of these obligations, in other words, the basic elements that hold the



system together, are values, norms and roles as structural elements (Marshall, 2005: 578).

As can be observed, Parsons bases social structure and functioning on the organismic approach. He shaped the field through system theory and prioritized system, subsystems, structure, and function in explaining social life. However, considering society in an organismic context does not necessarily place the individual, who is the actor of the society, in a passive position. According to Parsons (1968: 46-47), "individual as a social actor does not mean an organism, but the ego or self". This point of view, in Parsons's structural functionalist approach, opens the door to the agency of the individual and his rational choices in social actions.

Integrated disaster management in terms of Parsons's theory of systems and the general lines of the theory a sociological perspective on the role and function of social actors can be developed. That is, integrated disaster management points to an intervention towards the social system and structure, since it includes both pre-disaster and post-disaster stages and is a process in which the society is fully involved. Accordingly, the state of social action in systems theory emphasizes a situation sought and/or applied at each stage of integrated disaster management. On the other hand, it can be said that a continuity pattern has been established among the elements of the system, because the main goal of integrated disaster management is the establishment of social life as in the pre-disaster period and preparation for subsequent disasters. It points to an understanding that aims to re-harmonize within an integrated disaster management system against the destruction caused or to be caused by the disaster. Values, norms, and roles embedded in social systems theory in integrated disaster management It can be considered in terms of providing a reference point for the action of social actors to combat disaster.

However, one of the criticisms of Parsons' system theory is that the agency of the individual is shaped only through the mechanisms envisaged by the social system and structure. Poloma (1993: 165), while interpreting the subject of individual agency in Parsons' theory, uses the following expressions: "Women and men are rational in their actions, but their actions can be controlled by the internalization of social norms... Parsons' view of alternatives in action consists of options that are created structurally". In this respect, while examining the integrated disaster



management process, which is the main subject of the study, the Parsonian equivalent of the individual's contribution to disaster management is the adoption and implementation of social processes related to disaster management by individuals.

Both the emergence of a struggle based on values, norms, and roles, as well as the re-establishment of norms, values, and roles that have been destroyed due to disasters, in response to the damage (or the possibility of) disasters to the social structure, are the sine qua non of integrated disaster management. In connection with this, it is tried to ensure the continuity and functionality of the system, in other words, the damaged social institutions through values, roles, and norms, with the participation of each social actor.

Integrated disaster management, including the fight against disaster risk and danger. It shows parallelism with the outputs of the social system, which develops a reflex to prevent harm to the social structure and is built with this goal. The stages of achieving the goal, integration, and maintaining a pattern in social system theory provide rich data for each stage when the integrated disaster management issue is taken into consideration. For example, the intervention phase aims to overcome the moment of emergency and crisis as soon as possible and to switch to the recovery phase to return to daily life (or normalization in the popular expression after the pandemic). At this point, the coming together of social institutions and actors, which are part of the system, to reduce the damage of disasters can be evaluated in light of the concepts of integration and togetherness. On the other hand, actions that are required by integrated disaster management in the post-disaster or pre-disaster stages and that have certain rules/reference points can be evaluated within the scope of maintaining the pattern in system theory. Each disaster management step depends on certain rules and the possibility of success increases by making these rules as public as possible. In summary, it is possible to observe the outputs of social system theory such as reaching the goal, integration, and, maintaining a pattern at every stage of integrated disaster management.

The collective consciousness that Emile Durkheim puts based on social life and organic solidarity presented as the organizational model of modern societies are



among the basic concepts that feed the background of integrated disaster management.

In the light of various arguments and definitions, collective consciousness is a social It can be explained as a perception and action style that ensures the continuity of social institutions and the continuity of social institutions, ensures transfer of culture and norms to the next generations, and foresees the participation of its members in society with a functional goal (Durkheim, 1984: 39; Wortmann, 2007: 581-582; Swingewood, 1991: 113)). Collective consciousness exists “externally” in the individual and is internalized through beliefs, norms, traditions, teachings, ideas, and values (Turner, 2005: 699-700).<sup>4</sup>

As in the systems theory of Parsons, which was influenced by Durkheim, it is seen that the structure is prioritized in the collective consciousness. The individual cannot continue his daily life by isolating himself from the expectations of society, and even each behavior depends on the external influence presented/imposed on him by the collective consciousness (Burns and Engdahl, 1998: 68-70). Beyond affecting the behavior of the individual, the collective consciousness both determines the social benefit-based orientations of the individual from the functional point of view and becomes a point of departure to compensate for the problems or disruptions that occur in society.

In the development of the concept of collective consciousness, Durkheim's concept of mechanical solidarity there is the effect of a form of social organization that he describes. Similar behavior patterns emerge in traditional societies where members have similar cultural backgrounds and expectations, and where economic activity occurs in similar forms (Schirmer, 2014: 65, 67). However, in modern societies, there is erosion in the collective consciousness due to the increase in population, urbanization, diversification of production and economic functioning, and many other factors that open the door to individuality (Müller, 1994: 79). Especially at the end of the 19th century, this erosion, and the resulting anomie, which made its impact felt in Western European societies, stand out as the main factor that led to the development of the concept of organic solidarity. Because, according to Durkheim, the lack of division of labor in modern societies indicates a state of anomie in which social disintegration is experienced, and only “wherever organic solidarity is found,



there is a sufficiently developed arrangement that determines the mutual relations of functions” (Durkheim, 1935 cited in Olsen, 1965: 39, 42). The very absence of this regulation represents the beginning of anomie. Therefore, in the name of or because of the observation of a new kind of social unity, Durkheim explained the (or should be) interconnection of the differentiating components in society with the concept of organic solidarity, in which every specialty and profession is functionally included (Merton, 1994: 18). Although organic solidarity is seen as a modern compensation for the collective consciousness (or mechanical solidarity model), it emphasizes a common social consciousness and its re-establishment. This expectation envisages that different areas of expertise come into play in every issue concerning society and that social redress mechanisms become operational in this way, if necessary.

It is possible to examine the importance of collective consciousness and organic solidarity in integrated disaster management at a few basic points. To address the concept of collective consciousness in the first place, the realization of a common consciousness and related action among social institutions and actors in the management of pre-disaster, during and post-disaster stages can be seen as a reflection of collective consciousness. For example, in the event of a fire, an individual's intervention in the flames by taking a fire extinguisher and without expecting any response, without the possibility of his house or vehicle being affected by the fire, indicates that some basic human and social values are embodied in that individual and that it is an "intervention" for the safety of life and property of other members of the society. reveals the fact that it can be found. The focus here is not to assist a different person as an individual, but to respond to an emergency or disaster that will disrupt social life through shared collective consciousness. Similar examples can be replicated for pre-disaster management stages. At this very point, a moral understanding of Durkheim, which is assumed to be internalized by the members of the society, originating from the collective consciousness, and aiming at the continuation of social life itself, can be put forward. Taking society as a living organism, Durkheim examines the function of this organism and its subcomponents within the framework of facts and values and says that the facts and values formed by the collective consciousness reveal a morality for the benefit of society (Durkheim, 1984: 78). This situation justifies the altruist position that the individual should take in terms of society and other members of society in disaster management



processes, on the basis of morality. In the absence of a moral notion that motivates the individual and is connected with the collective consciousness, the healthy functioning of the "organism" will not be possible. In other words, it can be argued that disaster management processes need a community-based morality, a morality in which individuals consider the other, both in the pre-disaster and post-disaster period. It is possible to examine the importance of collective consciousness and organic solidarity in integrated disaster management at a few basic points. To address the concept of collective consciousness in the first place, the realization of a common consciousness and related action among social institutions and actors in the management of pre-disaster, during and post-disaster stages can be seen as a reflection of collective consciousness. For example, in the event of a fire, an individual's intervention in the flames by taking a fire extinguisher and without expecting any response, without the possibility of his house or vehicle being affected by the fire, indicates that some basic human and social values are embodied in that individual and that it is an "intervention" for the safety of life and property of other members of the society. reveals the fact that it can be found. The focus here is not to assist a different person as an individual, but to respond to an emergency or disaster that will disrupt social life through shared collective consciousness. Similar examples can be replicated for pre-disaster management stages. At this very point, a moral understanding of Durkheim, which is assumed to be internalized by the members of the society, originating from the collective consciousness, and aiming at the continuation of social life itself, can be put forward. Taking society as a living organism, Durkheim examines the function of this organism and its subcomponents within the framework of facts and values and says that the facts and values formed by the collective consciousness reveal a morality for the benefit of society (Durkheim, 1984: 78). This situation justifies the altruist position that the individual should take in terms of society and other members of society in disaster management processes, based on morality. In the absence of a moral notion that motivates the individual and relates to the collective consciousness, the healthy functioning of the "organism" will not be possible. In other words, it can be argued that disaster management processes need a community-based morality, a morality in which individuals consider the other, both in the pre-disaster and post-disaster periods.



In addition, the existence of collective consciousness externally in individuals and forcing the individual to act in favor of society carries this concept to a vital position in integrated disaster management, which has objectives such as returning to social life and less damage to society in subsequent disasters. Because disaster awareness and the dynamics of fighting against disasters, which are expected to be developed by public institutions, non-governmental organizations, and citizens in integrated disaster management, emphasize a common consciousness. In the collective consciousness, the individual's participation in society with a functional goal can be read as individuals taking responsibility with a functional goal in disaster management stages in integrated disaster management. As a result, although the collective consciousness mostly emphasizes the forms of organization, perception, and action between the individual and the social structure in traditional societies, it is still a point of reference and legitimacy for individuals today, can trigger individuals in terms of common feelings and thoughts, and in this respect, it is possible for integrated disaster management to become a part of each part of the integrated disaster management. can find meaningful responses in terms of stage, actor, and institution.

Organic solidarity, which is used instead of or in line with the concept of collective consciousness in modern societies, creates experiences that can be observed in integrated disaster management stages. Social actors and institutions with different functions are struggling with disasters through different business lines to reduce the effects of the disaster before, during and after the disaster and to be prepared for the next possible disaster(s). This situation arises from the diversification of material and moral cultural elements and economic functioning in modern social life through occupations and occupations. The realization that it is possible to fight disasters before and after them has resulted in the organization of these different professions and occupations against disasters (and with a collective consciousness).

"Photographers" of the transition from traditional societies to modern societies and the founding scientists, who tried to explain it in the light of theories, introduced concepts specific to a new kind of sociability. Rationality or rationalization is one of these concepts. This concept, which made its impact with Max Weber, in its most



general form, claims that the basic mental and practical references in the establishment of social and economic life are reason and rational thinking (Weber, 1968 as cited in Ritzer, 1975: 628). This idea, called rationalism, predicts the movement from rational data in the functioning of social institutions and in the social actions of individuals. In modern societies where complexity and organic solidarity are dominant, it is possible to get rid of this complexity with actions based on calculable and reasonable cause and effect relationships. For example, the legal/rational authority that Weber uses to explain the governance of modern societies derives its legitimacy from mental inferences and the laws and rules that are the written reflections of these inferences (Weber, 2019: 54-56; Beetham, 1991: 38). The religious-related sacraments existing in traditional authority have been replaced, perhaps, by rational laws based on reason and logical inference, as a new sanctuary with modernization.

The establishment of socio-economic life through a wide range of occupations and occupations with modernization brings the circulation of knowledge that requires expertise for the effective use of resources and distribution among the members of the society (Alexander, 1992: 182). To put it simply, individuals can have a place in socio-economic life with a solidarity that considers the benefit of other members of the society and specialization that forms the basis of this solidarity. At this point, it is necessary to say that specialization determines the course of the individual-society relationship as a rational action. Because expertise in each field is possible with rational perception, design, and actions.

The issue of rationalization and specialization gains a much wider impact in today's global society. In this context, it can be said that these concepts, which are interpreted by the founding sociologists for social life, have concrete counterparts in the fight against disasters and disasters that open the door to a social system, structure, and function issues. If we look at the integrated disaster management framework, which is the main subject of the study,

a) measures to be taken against disasters that vary and are uncertain when and where they will occur,



b) It is important to analyze and apply the intervention and improvement steps to be taken after disasters that cause destruction at different scales, with rational and expert knowledge.

Each of the stages of impact analysis, forecasting, early warning, prevention, response, recovery, and preparedness in integrated disaster management includes rational calculations, analyses, and predictions. At the same time, these calculations and analyses require or reveal expert knowledge.

Processes such as organic solidarity, specialization, and rationalization that emerged in social life in the modern period gradually strengthen the bureaucracy phenomenon experienced by today's societies. Bureaucracy, which has an important place in Weber's works, is a power attached to the authority by itself, the rules that take its power from the organization, the disciplinary system that determines the organizational action, the codified and standardized version of the rules, the rules and actions that determine the limits of legitimacy, the functional sharing of duties, the hierarchical hierarchy of authority. Representation is the rational determination of rights, responsibilities, duties, and obligations, and the hierarchy is formed according to seniority and merit (Clegg, 2007: 376-377).

In modern societies, both in state institutions and in the private sector, socioeconomic the continuation of life and the inclusion of individuals in social institutions are possible with the existence of bureaucracy. Because in modern societies that operate with a rational approach, record keeping, transparency and accountability are almost a necessity (Balcı, 2005: 330). During the period from birth to death of the individual, both the education and health services he receives and his existence in business life are constantly recorded, and even the minimum connection with the political institution is established through the election and/or election processes, which also include registration and formality. In addition to these, individuals also deal with this issue of registration, accountability, and transparency at almost every stage they are involved in the social organization.

It would not be wrong to say that the bureaucracy that the individual faces while continuing his social interaction in the more formal field has become almost a necessity for modern society. On the other hand, it is inevitable that the initiative of both public institutions, the civil sphere and individuals regarding the course of



social life and social change will be fed through a bureaucratic channel. For this reason, it can be stated that the struggle against disasters that cause mass destruction, loss and damage and thus affect, change, and transform the social system and institutions is not independent of bureaucracy.

The bureaucratic steps that determine the official and operational course of integrated disaster management ensure that collective consciousness and solidarity are included in a rational functioning in the face of disasters and ensure this through legal means. It has been determined beforehand which field and form of action each social actor and institution will be subject to, both before and after the disaster.





## **2. TERMINOLOGY, RISK CONCEPT, SCOPE, RESOURCES**

### **2.1. Emergency**

It is the events that stop or interrupt the normal life and activities of the whole or certain segments of the society and that require urgent intervention and the crisis created by these events. It is a word that enters our language as the equivalent of the English word "emergency" and is used for all situations and situations that require urgency. In the US disaster literature, it is defined as "any situation or event decided by the President and requiring the use of federal resources if local resources are not sufficient". This term, which has been widely used in medicine for years, entered our disaster literature after the 17 August 1999 Izmit Bay earthquake, upon the recommendation of the World Bank. Difference from disaster management; It is a form of management that starts with the occurrence of an event that is not continuous, limited in time, considered as an emergency, and ends when the reasons that require the emergency are eliminated. It generally covers disaster management's response and short-term recovery activities.

### **2.2. Disaster**

Natural, technological or human-induced events that cause physical, economic and social losses for all or certain segments of the society and stop or interrupt normal life and human activities. Another definition for disaster; "Arises suddenly or over time in places where human communities live, realized both by the normal movement of nature and by the direct or indirect intervention of man; It is a social phenomenon that causes great damage and losses in physical, economic, psychological and many other aspects and has important social consequences in terms of its effects" (Can, 2020: 20).

Disasters cause physical, economic, and social losses, they are natural, technological or human-induced events that stop or interrupt activities and make it difficult for people to produce solutions by their own means. For hazards to turn into a disaster, they must harm life, the natural environment, property, and business continuity.

In other words, a disaster is a natural or natural disaster that negatively affects a society or the environment. It is a technological or human-induced impact. Today, disasters appear as the results of wrong risk management. These risks are the product



of dangers and vulnerability. While crisis is a more inclusive concept, disaster can be considered as a sub-title of this concept.

In short, disaster management is the work that aims to prevent events that may result in disasters or to reduce their damage. As can be observed, the definition of disaster and almost every component of this definition is based on sociality has a plan. The results highlighted for the post-disaster period refer to the changes that will occur in social institutions and social functioning. For this reason, the greater the extent of the destruction caused by the disaster in terms of scale, scope, and duration, the more the social structure is affected (Fischer, 2013: 96).

On the other hand, the sociality of disasters and the background of sociology-disaster relationship. It is related to the fact that it is called a disaster in itself. That is, it is possible for any natural event or destruction caused by humans to be described as a disaster when there is an impact or transformation for that society or community. In AFAD's definition of disaster, there is an important statement in terms of perceiving this situation in more detail: "Nature, which causes physical, economic, and social losses for all or certain segments of the society, stops or interrupts normal life and human activities, and where the coping capacity of the affected society is not sufficient, technology or human-induced event. Disaster is not an event itself, but its result" (AFAD, 2021a). This result alone does not concern an individual or individuals, who are the actors of these institutions, experience problems in different scales related to their social life.

In a broader context, it has to do with the fact that the change that occurs concerns society itself. For this reason, the damages arising in terms of social structure, functioning and institutions are determinative in being called a disaster. However, because of the disaster, social institutions such as family, economy, health, education are damaged, they cannot fulfill their functions for a certain period of time, and individuals who are the actors of these institutions experience problems in different scales related to their social life.

Pre-disaster management stages and the interest in these stages, is important for awareness. Because although these stages express the situations in which social institutions and actors organize in a very short time and contribute to the intervention and recovery stages, the deficiencies in pre-disaster management or the absence of



any initiative in this regard cause the disaster to cause more damage and loss for that community or community and their consequences. It can be forgotten over time. However, risk analyzes, information studies, consolidation or rehabilitation of physical spaces and geography (especially the improvement of stream beds or creation of canals in terms of floods), emergency and first aid training for the residents of the community or regions at risk of disaster, and communication networks carried out during the post-disaster management stages. control and capacity building and other steps (Ergünay, 2005: 10; Stenchion, 1997: 41) both keep the collective memory of the previous disaster alive and encourage the society to be vigilant for the next disaster. This state of reminder and encouragement creates a disaster agenda for every actor, from citizens to civil society and official institutions. In this respect, the disaster management cycle appears in the form of claims, expectations and practices regarding the social structure, social institutions, and social functioning. This situation emerges more clearly in integrated disaster management, which is the current subject of disaster management.

### **2.3. Characteristics of the Disaster**

Regardless of its sources, the size and characteristics of the disaster losses, injuries, structural damages and social, economic, and environmental (property) losses caused. However, in the public opinion, the magnitude and importance of the disaster is evaluated by the size of the loss of life and injuries caused by the disaster rather than the economic losses (Ergunay, 2009: 4). Although natural disasters affect the whole geography, it has a rather dense population poses a significant risk in residential areas. Therefore, reducing the risks of natural disasters is of greater importance than other disaster studies. The factors affecting the characteristics of the disaster are the probability of occurrence of the disaster, the danger of the disaster, the distribution of the man-made elements that are not affected by the disaster and the level of vulnerability that determines the extent to which the society and the environment are affected by the disaster. These three factors are directly related to the extent to which they affect the society and the environment during and after the disaster, as well as determining where, how severe, and how often the disaster occurs and what side effects it has.



The main causes of the risks of natural and technological disasters. Natural disasters and the urban environment are disorders. Disasters not only cause physical destruction, but also negatively affect development. Disasters are sudden, unpreventable events that cause long-term effects in social, political, economic, and natural life, causing destruction to people and a certain region, as they usually contain negative elements. Therefore, because they cause many psychological disorders, they leave a deep impact on the memories of societies (Yavaş, 2001: 118-138). Disasters: their occurrence rate, there are two types as sudden onset and slow onset, disasters possible in the group. As an example of sudden disasters; are earthquakes, flash floods and mudflows, avalanches and rockfalls, volcanic eruptions, nuclear or chemical accidents, storms, and typhoons. In such disasters, if the preventive and protective measures that the society can take against disaster events are insufficient, great loss of life and property, as well as social, economic, environmental, and psychological losses are great. For slowly developing disasters; Global climate change, drought and hunger, erosion, desertification, epidemics can be given as examples. Since the damage and losses caused by such disasters develop gradually over time, it is easier to take protective, preventive, and risk-reducing measures. According to their origin, disasters can be classified as geophysical, meteorological, technological, and human-induced can be divided into three groups. Geophysical disasters; earthquakes, landslides, rockfalls, volcanic eruptions; disasters of meteorological origin; floods, drought, storm, global warming, desertification, technological and man-made disasters; nuclear and chemical accidents, major fires, environmental pollution, terrorist incidents or wars.

#### **2.4. Factors Causing Disaster**

To explain the factors that cause disasters, first of all, the concept of danger is examined. It is necessary to stop. Hazard can be defined as events that are natural, technological, or human-induced and that can cause physical, economic, social and environmental losses directly or indirectly. The types of events that may pose a danger to any social environment are caused by nature (earthquake, drought, flood, avalanche, etc.), based on violence (war, terrorism, internal conflicts, etc.), based on deterioration (climate changes, erosion, environmental pollution, economic and environmental pollution). social deterioration, etc.) and based on lack of education and inadequacies (technological accidents, traffic accidents, fires, etc.).



As can be seen, the factors causing the disaster are directly related to the origins of the disaster.

It is possible to divide disasters into three groups according to their origins as geophysical, meteorological, technological, and human-induced. Geophysical disasters; earthquakes, landslides, rockfalls, volcanic eruptions; disasters of meteorological origin; floods, drought, storm, global warming, desertification, technological and man-made disasters; nuclear and chemical accidents, major fires, environmental pollution, terrorist incidents or wars.

Indeed, the distinction between natural and man-made disasters is becoming increasingly clear and disasters trigger each other with chain effects and cause increasingly complex results. However, crises caused by natural disasters such as earthquakes, floods, unexpected and sudden although they occur naturally, they are not unpredictable. As a result of developing scientific research, the probability is calculated in a certain time interval, although the timing is not known exactly. In addition to natural disasters, disasters caused by the human factor can also cause crises. Intensive housing construction on riverbeds and fault lines, lack of participatory practices in producing common solutions, political and financial interests, corruption in the implementation of quality and moral rules can be given as examples of such disasters.

## **2.5. Disaster Management**

Disaster management can be expressed as the management of all institutions and organizations of the society and the public and their resources to plan and implement the necessary studies to prevent disasters and reduce their damages.

Accordingly, the prevention of disasters and the reduction of their damage, it refers to the struggle process that should be done by the society to intervene in the events in a timely, fast, and effective manner and to create a safer and more developed living environment for the communities affected by the disaster.

In other words, disaster management is the process that a settlement unit faces.

It is the planning and implementation of when, with which task and authority, with which resources, institutions, and organizations to undertake their duties, and to implement them during and after the disaster, in order to foresee the dangers, losses



and damages that will be incurred in the event of these dangers, and to keep these losses and damages at the lowest level.

The main feature of disaster management is that it is prepared and prepared by many institutions and organizations together.

It is the coordination of plans in which one's duties and responsibilities are determined. For this purpose, after disaster plans, regardless of their size, are prepared, an effective action plan should be prepared and updated according to time, for the institutions, organizations and individuals assigned duties and responsibilities within these plans to fulfill their duties in a timely, rapid, and effective manner.

In the modern concept of disaster management, reduction of losses and damages, preparation, forecasting and studies for pre-disaster protection such as early warning and understanding disasters “Risk Management”; Post-disaster studies such as impact analysis, intervention, improvement and reconstruction are considered as “Crisis Management” (Kadıoğlu, 2008: 69-74).

## **2.6. Phases of Disaster Management**

Disaster management consists of three phases: pre-disaster, during and after the disaster. In the pre-disaster phase; the least harm and physical damage to the society due to possible disasters. Taking all the necessary technical, administrative and legal measures to survive with losses, preventing incidents, if not, ensuring that search-rescue, emergency aid and recovery works are carried out in a timely, fast, efficient and effective manner, adding disaster mitigation studies to every stage of development or development planning and thus, to prevent the increase of the existing risk and to ensure a sustainable development, to implement training programs that will ensure that every segment of the society is equipped with the necessary information to get rid of the effects of the events with the least damage, and to establish a culture of harm reduction in the society.

During the disaster phase, information from the disaster area and disrupted transportation opportunities activities related to environmental health such as re-establishment, performing search and rescue and first aid activities, creating temporary housing areas for people and meeting their vital needs, taking security measures, carrying out activities related to environmental health such as possible



situations such as fire, explosion, communicable diseases and damage as soon as possible. detection studies are carried out.

In the post-disaster phase, for as few casualties and injuries as possible activities, ensuring the immediate recovery of the injured, meeting the vital needs of the communities affected by the disaster and bringing life back to normal as soon as possible and managing environmental losses to be minimal, establishing safer and improved habitats for disaster-affected communities.

**2.7. Accreditation:** is the issuance of a certificate of conformity to private organizations and non-governmental organizations.

**2.8. Preparedness:** All kinds of activities carried out in advance for the purpose of an effective response to disasters and emergencies.

**2.9. Recovery:** Activities and restructuring aimed at the normalization of life deteriorated by disasters and emergencies.

**2.10. Intervention:** It is the work to provide life and property rescue, health, subsistence, housing, security, property and environment protection, social and psychological support services in disasters and emergencies.

**2.11. Risk:** It is the measure of the values to be lost according to the probability of danger in each area. Word risk: It refers to the damages that a particular hazard may cause, in a specified time in the future, to the assets or the elements in danger, depending on their damage or vulnerability. In short, risk can be defined as the possibility of loss or damage.

As it can be understood from this definition, to talk about risk or the possibility of loss.

- the existence, magnitude and frequency of a hazard or event of a particular magnitude.

- with the existence of values to be affected by this hazard,

it is necessary to know or estimate the rate of being affected by the hazard or event or the vulnerability of these values.



Disaster risk mathematically; We can also express it as  $\text{Risk} = \text{Danger} \times \text{Assets} \times \text{Vulnerability}$ . As can be understood from this expression, first, to determine the disaster risk; It is necessary to determine the locations, sizes, frequency of occurrence, recurrence times and the areas they may affect, the inventory of physical assets such as population, structure, infrastructure, and economic, social, and environmental assets that may be affected, and their exposure rates (vulnerability) should be known or estimated. In a more general definition, disaster risk; We can also define it as the damages and losses that a natural event or hazard may cause on human settlements, depending on the existing physical, social, economic, environmental, political, institutional, and cultural processes.

In general, the concept of risk emerges as a concept that contains uncertainties. In the face of any situation, if the statistics of probability distributions can be obtained about the results of the situation, there is risk, if a common attitude cannot be displayed on this issue, there is uncertainty (Özer, 2011: 337). The inability to make statistical inferences about a subject due to the uncertainty involved in the concept of risk, and the uncertainty of repeatable risk situations even if they are, causes a lack of foresight in terms of decision-making and planning on this subject. Therefore, it should be said that every uncertainty that exists is one of the important points that should be evaluated within the scope of risk management. In classical risk analysis approaches, decision makers can evaluate the situation holistically by taking the uncertainty into the analysis, according to the possible future results.

It is stated that it should be approached from a single point of view (Köse, 2007: 43).

In order to identify risks in risk analysis, first of all, a pre-risk screening system should be established. The activities carried out in the screening system also require an effective crisis management. Because the goal in risk management is not to eliminate the risk, but to overcome the crisis by minimizing the damage of the hazards that create the risk in a possible crisis (Tunç et al., 2018). For this reason, it is necessary to apply to crisis management at the stage of determining the ways to be followed in risk analysis. As a matter of fact, the steps in the scanning system determined in risk analysis in risk analysis approaches were determined by associating them with crisis and crisis management. The steps determined in the scanning system that enables risk analysis are as follows (Özer, 2011: 338):



Alternatively risk management can utilize  $E[\text{Losses}]$  for repeating risks and  $\text{Min}\{\text{Max} [\text{losses}]\}$  for disaster like unique, once-in-a-lifetime risks. For repeating risks, as the average tends to the expected value in the long run, one can minimize total overall losses by trying minimizing expected losses. However, if the risk is not so frequent and/or non-repeating and the possible losses are so great as to threaten the firm's existence, the decision-maker may opt a strategy to minimize the maximum exposure to maintain continuity of firm's life span. (Aksoy, class notes)

- **Problem Management:** The solution of the existing problem will affect those at risk considered as a type of problem. Problem in problem management step it is tried to reduce the negative effects of the problem with management. Problems in this direction should be separated into short-term and long-term in terms of the effects they will cause. Some crises for these problems, as problems can cause crisis in the long- or short-term scanning is also required.

- **Risk Evaluation:** Here, risk factors are defined, and weaknesses are detected. Therefore, before possible crisis situations are detected, weaknesses should be determined. Some measures should be taken to eliminate it.

- **Relationships with Groups at Risk:** In case of risk, the owner of this risk groups that will be most affected by the dangers to which they are exposed should be identified and communication with these groups should be made in. Communication with these groups will be most beneficial in times of crisis. Because with pre-crisis awareness raising, panic situations that will be experienced during the crisis and these new risks and crises that will be created by these situations will also be prevented.

The risk screening system created by determining the steps above will make the risk determination process more concrete and planned. In the implementation of the risk screening system, a successful risk management process should be followed by defining the risk, measuring the risk, judging the risk, evaluating the risk, and finally following the risk analysis steps. In the risk management process, it is basically aimed to define, control, and record the danger, to define, control and record the opportunities, to minimize the risks, to maximize the gains, to prevent and reduce the losses, to optimize the gains, to manage the crisis effectively and finally to reach the maximum management capacity (Ozer, 2011: 346).



**2.11. Risk reduction:** It is all kinds of planned interventions to be taken to prevent, reduce or share possible risks according to disaster scenarios developed in a certain segment or area.

**2.12. Risk management:** It is the planning principles in this area with the studies to identify, reduce and share the risk types and levels at the country, region, city scale and local scale.

**2.13. Civil defense:** To be taken to minimize the loss of life and property of the people against enemy attacks, to protect all kinds of vital public and private facilities and institutions and to make improvements that will ensure the continuation of their activities, to support the defense efforts at the highest level and to keep the morale of the people high.

**2.14. Mitigation:** Risk management and prevention measures aimed at eliminating or reducing possible damages that may occur in disasters and emergencies.

**2.15. Risk Governance:** Responsibility, legality, impartiality, traceability, participation, coordination, locality in service. It includes the elements of priority (subsidiarity), effectiveness and educational awareness and must be considered at the local and central level. Ethical principles in reducing disaster risks are solidarity, joint responsibility, non-discrimination, humanity, objectivity, consistency, impartiality, cooperation, controlling the land, and the role of the press in disaster prevention.

**2.16. Crisis:** In the literature, it is possible to come across different definitions of crisis from social, economic, and political perspectives. Among them, "All dangers and threats based on physical, social, economic and political reasons that disrupt the normal order, likely to have negative consequences for society" or "Situations that significantly threaten the normal system and the basic values of society and require critical decisions under time pressure and stress. Definitions such as "All situations that pose a danger or threat to society and the environment" are frequently used. Crises can occur after various threats. Risk is the prediction of disaster. Risks always exist in the form of virtuality or image and only become a "current" reality when foreseen (Beck, 2011).



Crises are a serious, far-reaching threat; They are distinguished from normal events by their high degree of uncertainty. In this sense, crises are events that are undesirable, unexpected, unpredictable, emerge suddenly, are difficult to manage due to the uncertainties they have, are different from those encountered in ordinary periods, threaten the existence of the organization and its main goals, and require urgent decisions under time pressure (Boin 2004: 167, Paton et al. Flin 1999: 261, Cosgrave 1996: 28, McConnel and Dren-nan 2006: 60).

Whether organizational crises are caused by events occurring in the internal or external environment of the organization, in both cases, it indicates that there are some problems in the monitoring of the internal and external environment, sensitivity to these areas, and the weakness of communication between the organization and its people. In other words, the changes, developments, and signals related to these in the internal and external environment were not perceived, evaluated, necessary precautions were not taken due to the inadequacies in the communication system of the organization, and finally a crisis emerged (Example 2006: 116, Tekin and Zerenler 2005: 51). The failure of the organization to notice the signs of the crisis is due to the problems in the organizational structure (size that makes it difficult to control, bureaucratic and central tendencies, lack of communication, excessive formal control and the lack of initiative opportunities of the employees); from the inadequacies of the managerial capacity of the senior management (lack of foresight and intuition, not being able to act quickly, not making the right decision, resisting innovation, lack of leadership characteristics); It can be caused by the structure and problems of the communication system (lack of an effective information collection and distribution system, problems with the quality of information).

For the last 20-30 years, efforts to prevent disasters and reduce their risks in the international arena have been considered as a prerequisite, not an element of sustainable development.

Sustainable development can be implemented without the implementation of effective policies and strategies to reduce natural hazards and risks in countries such as Turkey, where there is a high risk of natural disasters such as earthquakes, floods, erosion, drought, landslides, avalanches and rockfalls due to its geographical location and climate characteristics. me? If rapid population growth, intense migration,



unplanned and uncontrolled settlement and industrialization continue, it will not be possible to reduce the physical, social, economic and environmental damages that may be caused by natural disasters.

The concept of sustainability, on the other hand, is limited to a shallow area, such as ensuring development by protecting the environment. Unfortunately, this understanding is not an isolated point of view, it is a common understanding in our country. It is emphasized that it is impossible to achieve sustainable development without the implementation of policies, strategies and actions that will reduce disaster hazards and risks in the international arena, and it is suggested that disaster risk reduction studies should be considered as a prerequisite, not as an element of sustainable development.

### **2.17. Factors Bringing Crisis or Risk**

Since the factors that bring out the Crises and Risks are different and diverse, we can explain these factors in two groups as external and internal factors.

#### **2.17.1. External Factors**

##### **2.17.1.1. Natural Causes**

Natural disasters, which cause physical, economic, and social damage on people, nature that completely stops or interrupts social life and activities defined as events the impact of natural events and the resulting crisis. The size can be determined by considering some factors. These (Ergünay, 2002: 70-76):

- The severity and coverage of the natural disaster,
- The quality and quantity of the measures taken,
- Legislation,
- Sensitivity of public institutions and society,
- To rank as the political, economic, and demographic structure of the country possible.



#### **2.17.1.2. Economic Reasons**

Factors that create instability and uncertainty in an economy can affect both directly and indirectly. The factors that directly affect the activities of organizations are as follows (Dinçer, 2003: 408):

- The narrowness or large price changes in the basic inputs of the organization,
- Disruption of price balance in goods or services,
- The deterioration in the country's balance of payments and the import-export regime changes,
- Decreased purchasing power of the people due to economic and psychological reasons,
- High rate of inflation.

The factors that indirectly affect the activities of organizations are as follows (Tutar, 2011: 30):

- Growth power of organizations due to credit crunch and lack of resources decrease,
- Decrease in demand due to political turmoil and therefore production falling,
- The emergence of conflicts such as strikes and lockouts,
- Decrease in investments and decrease in profitability due to inflationary effects,

#### **2.17.1.3. Technological Reasons**

Technology includes not only organizational machinery and equipment, but also management procedures, policies, practices, and work programs. While the technology creates the potential for serious harm, it is also stated that it offers great progress (Pearson, 1998: 64). According to these statements, although technology is of vital importance for organizations today, it is wrong with organizational crises when used, incompletely used or not adapted the possibility of confrontation.

#### **2.17.1.4. Social and Cultural Reasons**

Organizations, customers or consumers, their social order and they cannot be isolated from the cultural structure. Changes that will occur in both, organizations should be closely monitored. The value judgments of society can easily be made in a short



time. Even if it does not change, it may contain risks in the long term. Changing the value judgments of society, decrease in the interest of customers, social disturbances and unrest put organizations into crisis (Tüz, 2001: 409).

#### **2.17.1.5. Legal and Political Reasons**

Organizations are affected positively or negatively by the changes in the legal and political fields are adversely affected. The new effects that these changes impose on organizations if there are deficiencies in the fulfillment of responsibilities and obligations, crises arise interest. Organizations have a flexible structure, follow the changes in this field, adapt to new regulations and thus protect themselves from the crisis. It is a necessary feature for (Amount, 2000: 32).

#### **2.17.1.6. Reasons Originating from International Relations**

One of the reasons leading to the crisis in organizations is today's globalization. The result is the disappearance of political borders. Information and communication know no borders. In our age, the phenomenon of globalization manifests itself not only economically but also politically and making the world a small village by pacifying the nation-states and create new common goals and values for the future and order of the world (Kasapçopur, 2006: 13). Changes in international environmental conditions in the ever-changing and globalizing world, it affects more than one country at the same time, and it can show its effects in a very wide area over time. These effects are multinational. It is also a source of risk for organizations operating in their own countries as well as organizations can create.

#### **2.17.2. Intra-Organizational Factors:**

As noted among the characteristics of crises, some crises are only natural disasters suddenly, such as accidents by major transportation vehicles and terrorist acts.

Other types of crises develop within a certain period. Because the symptoms emerging in this process are not perceived by the consists of. According to Dinçer (2003: 409), although they are out of control and unpredictable, environmental changes have a role in the formation of crises, as well as the organization itself. Internal factors are also effective and even the main causes of the crises are internal.



### **2.17.2.1. Organizational Structure**

Being managerial and organizational models, mechanical and organic system to be evaluated. To adapt to sudden and unplanned developments in the environment. Compared to the organizations in the organic system, which have a horizontal and flexible structure that allows hierarchical and vertical organizations show less resistance to crises.

In other words, the mechanical structuring of organizations manifests itself as a cause of crisis shows (Amount, 2000: 35). However, the authority and responsibilities within the organization it is not known for certain, doubts arise about who is connected to whom, it is one of the most important reasons causing unrest among the personnel (Sümeroğlu, 2003: 40-41). To list the factors arising from the organizational structure of the crisis as follows possible (Tüz, 2001: 8):

- Decision making and implementation slowness,
- Communication gap between the managed and the managers,
- The decision mechanism is excessively centralized,
- Uncertainty of organizational goals,
- Excessive narrowness or width of the control area,
- Lack of innovation and creativity,
- Frequent conflicts,
- Rapid change of business and employees,
- Lack of coordination or coordination-centered problems,
- Excessive workload and therefore the stress of the environment.

### **2.17.2.2. Human Factor and Quality of Senior Management**

The reasons for the crisis arising from the senior management are listed as follows (Tüz, 2001: 7):

- Management's inability to keep up with the pace of change,
- Managers' lack of intuition and lack of foresight,



- Not perceiving or accepting crises as crises,
- Trying to solve new problems according to old problems,
- Inadequate perception of senior management's roles.

Organizational managers generally consider their roles to be limited to creating strategy, and they see themselves as strategists. However, the top management motivation of employees and raising their morale levels, organizational values, and their codes, creating a mission and vision, setting the goals of the organization and it has functions such as determining the ways to reach the goals (Tutar, 2000: 36). Organization management, which can be successful in ordinary situations, is unsuccessful in the face of crisis may fail. Even crisis situations take different forms for various reasons managers who succeed in any crisis situation when faced with a crisis, they may be inadequate and fail (Kasapçopur, 2006: 14).

#### **2.17.2.3. Insufficient Data Collection and Evaluation**

The features that make the information valuable; accuracy, timeliness, completeness, brevity, pertinence, and relevance (Amount, 2000: 38). Crises are just unexpected situations may not occur inadequate or slow in gathering information. Inability to collect sufficient information, incorrect collection, or correct collection and wrong interpretation also contributes to the emergence of the crisis. Usually in and around the ignorance of the threats created as a result of negative interaction leads to a crisis. The reason for this is clearly related to neglect, inability to gather information or inexperience.

#### **2.17.2.4. Problems Caused by Organizational Culture and Climate**

Culture; what the members of a community have shared since its past, learned they are the sum of the attitudes that are considered natural (Buch, 2001: 40). Perception in organizations organizational culture, which shows common ways of sharing thoughts, behaviors and values, and climate characteristics, by tightening organizational ties and motivating employees, productivity and adaptation to the environment and change, although this leads to an increase in the level of efficiency. If it cannot provide, it reacts to problems by introverting is one of the factors.



#### **2.17.2.5. Life Stages of Organizations and Organizational History**

Stages of organizational life, similarity with the life of biological entities shows. These stages are birth and development, the following maturity stage, and followed by regression and collapse. In other words, organizations are born just like living things, they grow and die. According to Dinçer (2003: 245), especially the development of crises in organizational life it appears to occur more frequently in regression and regression periods during growth. The crises encountered are generally due to the organization's incompatibility with the environment and new situations.

It can result in financial insufficiencies as well as the meaning of opportunity for the organization carries. The regression stage is a stage in which organizations are more likely to fall into a crisis is the period. In this period, human factors are more effective in the occurrence of crises and due to the incompetence of managers.

In the framework of the changing dynamics in the world, the concept of crisis is increasingly coming to the fore comes out. With the phenomenon of globalization, the separation of public and private sectors all over the world in the areas of perfect competition, innovation and creativity experienced in all organizations without developments have forced all organizations to manage crises that may occur.

The main idea in the management is not just to stop the crisis, but to reduce the damage as much as possible to reduce the loss of life and property in a way that minimizes the loss of life and property, at the same time turn it into an opportunity. This main idea is the core of the entire crisis management system. To manage the crisis, first analyze the state of the organization, its current processes and features should be done. To adopt crisis management practices as they are without a detailed study.

Attempting will cause the applications to fail of the crisis. It is possible to manage a good management in organizations a good crisis, a creative, talented and equipped team with the capacity to manage the crisis situation for organization is required.

Good crisis management depends on a strong decision and implementation strategy first and most. The important step is the event evaluation phase. In this step, the



event key previous events are compared, databases are kept up to date. Continuous memory freshness is ensured.

The most prominent feature of the crisis can be said to be uncertainty.

It puts people in an uncertain environment and therefore creates a great uncertainty environment for both the society and the administrators.

- Although it is possible to take precautions beforehand, it is very difficult to completely prevent crises.
- Crises threaten the existence and goals of the organization.
- There is a shortage of time, information and resources needed for action in times of crisis.
- Crises create tension in decision makers.
- Crisis can be turned into an opportunity when managed well.
- The crisis threatens the high-level goals of society, even its very existence.
- During the crisis, the prevention and foresight mechanisms of the society are insufficient.
- The crisis requires urgent intervention and creates time pressure especially on managers.
- The crisis is very difficult to control.
- The crisis process has the feature of being a vital turning point.
- The crisis affects the system psychologically and physically in terms of its current or future functioning.

Crises have complex processes that arise from the combination of many factors.

event. Therefore, although the factors that cause crises may differ according to the structure of the administration and the conditions in which it is located, change, which is the main source of crises, is the most important point to be emphasized. The most important feature in change is its speed, and the fact that there is a rapid change in terms of governance and the inability of the administrations to keep up with this speed is the main reason for the crises.



The main factors causing the crisis are the internal and environmental factors. In addition to factors, it can be considered in three classes as the interaction of other internal and external factors. Rapid environmental changes, insufficient information resources of the organization, up-to-date information.

Factors such as the absence of unnecessary information, inadequate communication and coordination, lack of planning, the existence of different value systems and the resulting increased administrative conflict can be listed as various reasons that cause crises.

## **2.18. Stages of the crisis**

The crisis is a process that consists of different stages, but each process is full of chaos and difficulties. The length of the phases that create the crisis depends on the type of crisis and its cause and size. It is necessary to analyze the crises in stages to identify the crises, prevent them from growing, eliminate them after the crisis occurs, and take precautions (Filiz, 2007: 11).

The crisis process consists of pre-crisis, crisis, and post-crisis phases.

### **2.18.1. Pre-crisis**

The pre-crisis period is the period before the crisis occurs. Crises during this period gives indications. In this period, the symptoms of the crisis, which are the indicators of the causes of the crisis, appear and end with the beginning of the consequences of the crisis. The pre-crisis period consists of three stages: blindness, inaction, and wrong actions (Tuz, 2008: 19).

**2.18.1.1. Blindness:** It is the name given to the period when the crisis should be recognized. In this period, inadequacies, gaps, and short-sightedness begin in management. Since the management is insensitive to the problems it encounters, it cannot perceive them as symptoms of crisis and therefore cannot produce solutions.

**2.18.1.2. Failure to take action:** The performance of the management decreases due to the problems encountered, but again, because the crisis cannot be perceived, no action can be taken or action can be taken. As a result, the symptoms of the crisis in the organization become more severe, productivity and quality decrease. There is low performance management.



**2.18.1.3. Wrong action:** Problems causing crisis are perceived by the management, but alternative methods cannot be developed, ordinary solutions are tried to be applied. Incorrect methods in problem solving reduce the performance of the management, and as a result, demotivation, restlessness, and tension occur. As a result of this negative atmosphere in the organization, the crisis begins.

“In the pre-crisis periods, there is a state of disorder and insolvency (entropy).

The concept of entropy, in a broader sense, refers to the tendency of the activities to be interrupted, the loss of balance, the emergence of confusion and disruptions, and the complete cessation of the activities of the system as a result. (Amount, 2011: 54)

Contrary to the private sector, in the bureaucratic life where a closed management system is applied and public entropy is more likely to occur. In organizations where disorder and insolvency prevail in the management, the signs of crisis cannot be perceived due to the managers' lack of managerial initiative and the insensitivity of the employees to their jobs. Organizations that fail to perceive the signs of a crisis cannot seize an opportunity to prevent a crisis. In this period, it is important to perceive the symptoms of the crisis, to prevent or reduce the severity of the crisis, and to take the necessary measures against the crisis in a timely manner.

### **2.18.2 Moment of crisis**

The moment of crisis is when the consequences of the crisis emerge and are experienced severely, and it is the period in which activities are carried out to terminate it. In this period, the impact of the crisis is felt most intensely on managers, employees, and citizens. In the same period, after the first crisis shock is over, necessary measures are taken according to the type and size of the crisis and efforts are made to get rid of the effects of the crisis. The moment of crisis consists of the escalation phase, the cessation of the escalation and the regression phases. At the climbing stage, order breaks down, uncertainty prevails, and there is an atmosphere of complete turmoil. In the second stage of the crisis, the measures taken to eliminate the said uncertainty and turmoil come into play and the escalation in the crisis is stopped or regressed.

The first duty of managers in times of crisis is to determine the situation. Managers during this period while taking measures that can solve the crisis, they should avoid



traditionalist and populist approaches. In this period when negative factors such as uncertainty, stress, interests, and the resulting chaos dominate, managers have an important responsibility in terms of making the right and quick decisions. The panic, pessimistic and insecure environment caused by the crisis regresses or disappears completely because of the right and quick decisions taken by the managers and sometimes because of external factors.

### **2.18.3. Post crisis**

The duration of this period when the crisis ended and its effects on the organization disappeared, may vary depending on the measures taken and the principles of their implementation. This period can also be considered as a period in which evaluations of similar crises that may occur in the future are made. Post-crisis recovery and learning processes take place in this period.

### **2.19. Consequences of the Crisis**

The post-crisis period, in which the wounds arising from the crisis are healed, the organization lost. It is a process of regaining its functions. Managers must work to eliminate the effects of the crisis. For this purpose, managers produce new projects, eliminate the uncertainty and ineffectiveness caused by the crisis, and make radical changes in the organizational structure if necessary. For example, it has been seen that the pressures in crisis environments create tension, fear, and insecurity on the members of the organization, and in this case, it affects the organization negatively in terms of management. After the crisis, managers should take the necessary measures to return the employees to their old motivations by making changes in the organizational structure and moral training.

### **2.20. Definition of Crisis Management**

Crisis management, taking precautions against possible crisis situations. It can be described as a management model that undertakes the tasks of minimizing the damage of the crisis after the crisis and applying and controlling the necessary preparations and activities for the restructuring of the organization after the crisis. The main task of crisis management; It is a body that predicts the situations that may endanger the existence of an organization and takes the necessary measures and



manages the process in order to overcome the crises that may occur in the lightest way.

Crisis management is to be prepared for possible dangers, to reduce losses during a crisis. It encompasses the analysis, planning, decision-making and evaluation processes that organize available resources for intervention and improvement. Since the risks that give rise to the crisis can be natural, technological, or human-induced, crisis management should analyze these risks and deal with them for the purposes of saving lives, preventing injuries, and protecting property and the environment.

As a result, the main purpose of crisis management is to prepare the organization for the crisis, it is possible to handle the crisis management process in five stages.

1. Receiving crisis signals
2. Crisis preparedness and protection
3. Controlling the crisis
4. Transition to normal state
5. Learning and Evaluation.

Activities related to crisis management can be grouped under four headings:

1- By knowing beforehand the factors that may cause the crisis, the size of the crisis and its effects.

mitigation and/or elimination

2- Increasing the effectiveness of the techniques to be applied at the beginning of the crisis

3-Detailing the response to the effects of the event that caused the crisis.  
development

4- In order to eliminate the effects of the crisis, the material and moral resources that have been damaged are to be replaced effectively and quickly.

Crisis management in terms of management approach Active Crisis Management and Reactive Crisis



It can be examined in two classes as management. Active crisis management approach: It is based on the principle that organizations carry out the necessary studies by considering this possibility before a crisis occurs. Reactive crisis management, on the other hand, is based on eliminating crises that have become evident or minimizing their negative effects.

Businesses often do not take the necessary care in crisis management because they see them as unexpected and unpredictable situations. That's why those well-planned organizational interventions are not needed by businesses. In special situations called "crisis" or "risk", the problems that arise solution necessitates taking special measures. From this perspective, to prevent the emergence of crises, to prevent the emergence of an unavoidable crisis. To minimize the negative effects of the crisis and furthermore, to take advantage of some opportunities created by the crisis, special measures should be taken. Good crisis management depends on a strong decision and implementation strategy. first and most the important step is the event evaluation phase. In this step, the event key previous events are compared, databases are kept up to date, continuous memory freshness is ensured.

### **2.21. Features of Crisis Management**

Crisis management is a special management model whose mandate is limited to the crisis and must have the following features.

a) Crisis management is a special type of management and is a process management consisting of multiple phases.

b) The crisis management process is long, continuous, and cyclical, complex and interactive.

the entirety of transactions.

c) Crisis management is related to situations that may endanger or make impossible by creating a threat to organizational life.

provides.

d) Crisis management helps the organization to anticipate possible crises and be prepared for the crisis.



e) In crisis management, the way decision makers perceive the crisis and its levels. It is valuable in terms of prevention and the perception capacity of the people who will manage the crisis has an important place.

f) Continuity of crisis management is essential, there is not before and after.

g) An effective crisis management requires the organization to take the crisis under control and overcome it with the least loss.

h) Crisis management varies according to the characteristics and types of the crisis and the organization.

I) It is an interdisciplinary approach.

## **2.22. Stages of Crisis Management**

Crisis management consists of four basic phases. In some cases, these phases may overlap, and sometimes it may need to be managed at the same time. Although the interweaving of the phases makes the precise distinction between the phases difficult, it is useful to use and examine them assuming they are independent of each other. However, crisis management should deal with the crisis phases as a whole and be applied effectively before, during and after the crisis. Preparedness and mitigation should be implemented effectively before the crisis, intervention during the crisis and recovery after it should be done. These phases are:

### **2.22.1. Crisis Preparedness**

At this stage, it is necessary to respond to any crisis threat with planning, training, and practices. An effective emergency management work is carried out to improve preparedness, to reduce damages in case of damage, to intervene and then to return to normal life.

### **2.22.2. Reducing the Damages of the Crisis**

Loss of life and property because of various hazards and their effects. These are the activities that are carried out to minimize or eliminate the damages to be caused in the long term and which are continuous



### **2.22.3. Intervention**

In order to protect or save living things and property under risk, emergency it is the work of carrying out emergency actions to evacuate victims using emergency personnel, equipment, and resources, to provide food, drink, shelter and medical care to those in need, and to ensure the operation of critical public services.

### **2.22.4. Improvement**

Society and individuals, workplaces, residences, common areas and these are revision studies that will enable government institutions to work on their own, return to normal life and protect them against possible risk threats in the future.

Risk management is a changing management in accordance with the changing world conditions, so it should be updated continuously. Successful and effective implementation of the crisis phases can be achieved by estimating the possible crisis of the organization and sharing the responsibility. It ensures that the risk management organizations that are made include a holistic structure, that the relevant units can be easily integrated within each of the four phases, and that the responsibility is shared within the organization in line with their areas of expertise, and that effective communication is kept under control between the units. The integration of the four phases in risk management can be achieved with the highest level of coordinated work by public, private sector, and voluntary organizations.

They are sudden, unpreventable events that cause long-term effects in social, political, economic, and natural life, causing destruction to people and a certain region. Therefore, they leave a deep impact on the memories of societies, as they cause many psychological disorders (Yavaş, 2001: 118-138).

When considered as a process, the last stage of the formation, development and resolution stages of the crisis is the emergence of the crisis (Coombs 2007: 18-20). If the risks cannot be noticed during the formation phase of the crisis, necessary precautions are not taken, and if they cannot be eliminated with risk reduction, the development process of the crisis begins (Davies and Walters 1998: 8). In the development phase of the crisis, signs of deterioration in the organization's performance begin to appear, and an atmosphere of chaos arises in the organization. At this stage, the organization brings together all its resources within the framework



of a plan to resolve the crisis (Boin and Lagadec 2000: 186). If the plans made at this stage are not successful in resolving the crisis, the organization will rapidly deteriorate and go towards disintegration/dissolution, which is the final stage of the crisis.

Crisis management is a management technique that aims to create organizational structures that can predict crises and take precautions (Mitroff 1994: 101). The first stage of the crisis management process is to try to identify the symptoms of the crisis. At this stage, the existence of early warning systems to anticipate the crisis, and the right decision-making capacity of managers to perceive the symptoms and make the necessary preparations are of great importance. The second phase after the identification of the crisis symptoms / risks; It is the stage of preparation for and protection from the crisis, in which necessary measures are taken to eliminate the damage that may occur with the least damage and to protect the organizational structure from deterioration. At this stage, it is necessary to plan to mitigate the unavoidable effects of the crisis, to constantly analyze the external environment, to inform the interlocutors in the internal and external environment of the organization, and to establish effective communication channels. In this sense, communication is important at every stage of crisis management.

Successful crisis management relies on a successful communication process. In times of crisis, communication should be based on a communication strategy that is prepared in advance and consists of information obtained at the time of crisis and should aim to deliver the information to the target audiences in the fastest and most accurate way. For this purpose, in the communication plan, the determination of the target audience, who will make a statement about the crisis, the education of this person, and the quality of the messages are important (Okay 2002: 486). Information about the crisis should be shared with the media and relevant audiences as often as possible.

### **2.23. Crisis and Risk Communication**

Insufficient understanding of its symptoms and signals leads to the emergence of crises. In this sense, communication is of great importance at every stage of the crisis management process (before, during and after the crisis). Because the crises are



caused by different reasons (organizational crises, disasters, economic crises, social crises, etc.), the role, actors, and communication method of communication differ in each type of crisis.

### **2.23.1. Communication as a Technology Showcase**

The communication dimension as a technology showcase focuses on the use and application of technologies in crises. Crises have begun to offer the opportunity to introduce advanced visual communication software and hardware and to create a showcase for them. Thanks to communication technologies, it has become possible for crises to be announced to the whole world on a global scale, to become more visible, and to involve large masses in the intervention process. Coombs 2007: 9). The main actors in this focus are technocrats who are interested in communication technologies and can use them. These technologies include radios, telecommunications networks, geographic and spatial planning information systems, decision support systems, e-mail, websites. Especially the web environment is the tool that provides the fastest and most widespread communication opportunity today (Okay 2002: 538). These technologies can be applied to many types of crises. The benefit of this focus is that communication technologies help provide a better infrastructure for combating and preparing for crises, facilitating the identification of possible disaster risks. With appropriate communication technologies, it is possible to provide accurate information to disaster-related institutions in a short time. While the focus of technology is advantageous in terms of providing speed and standard, it can also cause unsuccessful results due to problems, interruptions, and destructions in communication systems in disaster situations.

Technologies include radios, telecommunications networks, geographic and spatial planning information systems, decision support systems, e-mail, websites. Especially the web environment is the tool that provides the fastest and most widespread communication opportunity today (Okay 2002: 538). These technologies can be applied to many types of crises. The benefit of this focus is that communication technologies help provide a better infrastructure for combating and preparing for crises, facilitating the identification of possible disaster risks. With appropriate communication technologies, it is possible to provide accurate information to disaster-related institutions in a short time. While the focus of technology is



advantageous in terms of providing speed and standard, it can also cause unsuccessful results due to problems, interruptions, and destructions in communication systems in disaster situations.

### **2.23.2. Communication in the Meaning of Inter-Organizational Network / Network Connection**

Communication dimension in the sense of inter-organizational network refers to written, verbal and electronic communication between public institutions, companies, police and fire department, rescue units and other institutions that have duties and responsibilities at different stages of the crisis. It is a newer field in the literature than the other three focuses. The main actors in this field are the representatives of these institutions. The main objectives are the efficient allocation of resources and the coordination of activities. The advantages of establishing inter-organizational networks in the fight against crises are great. Since the system consists of actors with many different organizational perspectives and interests, the possibility of making mistakes is reduced, and the negativities that can be caused by planning from a single window with a group decision are reduced. Crisis communication will become more open, transparent, and accountable through inter-organizational ties. However, this focus has some limitations. In most organizations, information sharing may be limited or may change as information progresses between different levels. In this respect, it is important to ensure trust, a common feeling, thought and language among the intervening organizations.

### **2.23.3. Risk Communication**

Another concept related to communication in crisis situations is risk communication. In the crisis literature, risk is generally defined as the result of a danger.

It means the probability of losing the owned values. In this sense, risk differs from the concept of crisis in that it is related to the future, requires long-term thinking, and aims to reduce it (Ulmern et al. 2007: 155). Risk communication, on the other hand, is defined as a unit-based approach used to communicate effectively in situations of high anxiety, stress, emotional overload, or conflict. According to the US National Academy of Sciences, risk communication is an interactive process of exchanging information and opinions between individuals, groups, and other institutions. In risk communication theory, risk communication includes many messages about how



crisis situations affect the rules of the general / ordinary communication process, how communication takes place in these situations, the nature of risk, and messages related to legal and institutional regulations. The scientific literature on risk communication focuses on risk management, the control of risk, the problems that occur in the change in its size, severity and nature, and the strengths and weaknesses of various channels (such as press releases, public meetings, websites, small discussion groups) through which information about risk is shared. Initially, risk communication research focused on health or environmental issues such as toxic wastes, heavy metals, water pollution, nuclear energy, biotechnology, and did not deal with issues related to personal risk-taking behavior such as smoking, alcohol, and drugs (Covello et al. 2001: 390).

Risk communication is based on three theoretical models that describe how risk communication is carried out, how risk perception is formulated, and how risk decision is made. Together, these models provide basic ideas on how to coordinate an effective communication in risk situations (Covello et al. 2001: 391). These; Mental Noise Theory; Trust Determination Theory; Risk Perception Theory. According to the Mental Noise Theory, when people are under stress or upset, they have difficulty hearing, understanding, and remembering information. Therefore, in such cases, the communication should contain short, limited content, simple and understandable messages, and key points should be repeated. According to the Confidence Determination Theory, when people are upset or stressed, they do not believe that others listen to them, care about them, empathize, be honest, open, competent, and expert. According to the risk perception theory, there are many factors that determine how risk is perceived. Fifteen different risk perception factors directly related to risk communication have been identified. These factors affect the degree of fear and anxiety and affect behavior in the face of risk. Apart from numerical data, there are factors that affect people's perception of the magnitude of risk. For example, whether the risk is voluntary, whether the person can control the risk, whether there is a risk-based benefit, whether the risk is evenly distributed over the entire population, whether the risk is natural or man-made; whether the risk is familiar or unfamiliar, and on whom the risk is most effective.

German sociologist Ulrich Beck, one of the thinkers who criticize modern society, states that modern society has entered a new phase with the penetration of



technology into every aspect of our social life. According to Beck, advanced modern societies produce risks in addition to the production of wealth in the social sphere (2011: 25-27). According to Beck, the risk society is a product of modernization and the risks, dangers and threats faced by societies today can be considered as a side effect of modernity.

The main reason for this is that the concept of risk is an explanatory concept specific to modernity, as Beck insists on it (2011: 2). Therefore, anyone who conceives of modernity as an independent renewal process, for Beck, should be aware of the new stage of modernity, its reverse, that is, the development of the life world woven with risks. Because this concept implies a stage of development in which the social, ecological, and individual risks created by the modern society's renewal dynamics gradually emerge from the control of the industrial society and out of the sphere of influence of military institutions. The concept of risk, in its most idealized form, indicates a nervous wait for the possibility of a possible negativity, negativity, danger or adversity to occur. As it can be understood from this definition, risk arises from an uncertainty about the future and refers to the one about the future.

It is possible to say that there have been many economic crises that have deeply affected the economy in Turkey in the 30-year period. Especially in the last 15-20 years, there have been important economic crises such as the April 1994 crisis, the November 2000 crisis, the February 2001 crisis and the 2008 global crisis. The 2008 global crisis, which was more extensive than the crises experienced in the previous periods, greatly affected Turkey as well as many developing countries. In the 2008 global crisis, which negatively affected the competitiveness of businesses, many companies, especially SMEs, went bankrupt or came to a state of closure.

Today's business world operates in a highly complex environment. At any moment, it can face situations that can lead to critical consequences, in other words, opportunities and threats. Whether it is a danger or an opportunity, unexpected and unforeseen events force organizations to change unplanned and may even lead to crisis. Businesses must be able to successfully and effectively manage these critical situations so that their operations are not seriously interrupted. While doing this, he must act quickly but surely, being aware of the importance of every passing moment.



All efforts of businesses during the crisis are aimed at saving the business from this negative and painful situation. Although the methods applied in this process are appropriate and appropriate, it is very difficult or even impossible to save the business with zero loss, and it may take a long time to repair the losses and damages caused by the crisis. In this process, the enterprises' efforts to make quick decisions and implement them quickly may cause the crisis to deepen with wrong practices.

The main purpose of this study is to answer the questions of whether SMEs operating in Konya do any work to institutionalize crisis management in the face of both national and international crises that arise and become chronic, and if they do, what are the types, characteristics, and level of these studies. is to find. In this context, data will be collected and analyzed by survey technique from businesses operating in Konya and complying with SME criteria.

Theoretically, crisis is a situation of tension that is unexpected and unpredictable, that needs to be responded and managed quickly, that threatens the current values, goals and assumptions of the company by rendering the prevention and compliance mechanisms inadequate (<http://www.kobifinans.com.tr>). ) can be expressed as More broadly, the crisis; It is an intractable situation that threatens the high-level goals of an enterprise, emerges unexpectedly and unpredictably, invalidates the existing values, goals and assumptions of the enterprise, puts its life in danger, and requires immediate or immediate response, rendering the organization's prevention and compliance mechanisms inadequate. it is a situation that creates tension by creating a situation (Baran, 2006: 26). In another definition, crisis is one that affects the entire organization and damages it; events that can destroy it.

The crisis does not always include a bad and negative situation for the business. The Chinese word *wei-ji*, which means crisis, describes this situation very well. As a matter of fact, the word *wei-ji*, which means crisis in Chinese, consists of the combination of the words danger and opportunity.

In organizational sense, crisis is a tense situation that threatens the goals and existence of the organization, that may render the organization's risk prevention measures inadequate, that there are unexpected and rapid changes that require the organization's immediate response, that adversely affect the planning and decision mechanisms (Demirtaş, 2000: 357)". The most distinctive and tension-creating



feature of the crisis period is uncertainty. The crisis, which creates a danger if not managed effectively, creates an opportunity when handled with the right methods. In other words, crises can be a turning point for the organization, where it can turn it into an opportunity.

Crises can often come by giving warning signals step by step, but they can also emerge with some sudden new formations. In this context, crises occur in two different ways in terms of their emergence. Sudden crises, without any warning to the managers of the business; Employees, investors, customers, suppliers, the public and the company's income, stock prices include sudden deterioration and imbalances that negatively affect. Continuing crises, on the other hand, are forms of crisis that cannot be directly understood from outside or inside the company but can be perceived with different signals and analysis and control techniques applied at various times. In both crisis forms, negative effects and costs arise in terms of business activities (Irvine, 1987: 37; Titiz, Çarıkçı, 2001: 205).

It is stated Crises differ from normal conditions with the following features (Sucu, 2000: 19):

- They make the prevention and compliance mechanisms of the enterprise inadequate,
- They resemble important life-threatening diseases, require urgent and interventions,
- They create a tense environment, they are critical and threatening, they create insecurity, fear and panic,
- They affect all the elements associated with the system,
- Due to their unique characteristics, they do not allow the use of pre-prepared recipes,
- They require a review of current values, goals, and assumptions,
- Often, they appear out of nowhere.

A “crisis” occurs when there are big and significant differences between the level of interaction between the business plans and the business environment, and what the business management thinks and what happens (Andriole, 1985: 24). Many factors, both external (environmental) and internal (organizational), have an impact on the



emergence of crises. However, in general terms, it can be said that the mutual negativities between the enterprise and its environment were effective in the emergence of the crisis; either the demands and expectations of the environment exceed the resources and capabilities of the enterprise, or the environment cannot meet all the needs and expectations of the enterprise. This incompatibility disrupts the balance of the business and causes the crisis (Dinçer, 1998: 385).

The external environmental factors that cause the crisis can be defined as "factors that are outside the businesses and cannot be controlled". The greater the uncertainty and confusion in the external environment, the greater the likelihood of crisis.

Economic crises: It can be defined as severe fluctuations in prices and/or quantities in any good, service, production factor or foreign exchange market beyond an acceptable change limit (Kibritçioğlu, 2001: 1). Crises are related to the life cycle of the organization, hierarchical in different ways depending on the level and the causes of the crisis. They can be classified, also depending on the severity of the crisis can be differentiated.

Until the middle of the twentieth century, crises, demand, technological real economic variables such as progress or rate of profit was connecting. Today, types of crises have emerged that occur in money and foreign exchange markets, stock markets, banking sector, hot money movements, start in financial markets and gradually show their effects in real markets (Boratav, 2004,107).

Basically, it is possible to divide the economic crises into two. First, real sector crises, which are divided into crises in the goods and services market and unemployment crises in the labor market. The second is financial crises, which are divided into banking crises, currency crises and stock market crises (Balaban, Yıldırım, 2009: 17).

Discussions about the emergence of the crisis show that the crisis has a perceptual dimension. Therefore, when crises are examined based on their emergence, it is possible to distinguish between potential crises, perceived crises, felt crises and experienced crises. While potential crises correspond to the situation of finding the reasons for the emergence of the crisis, perceptual crisis is related to the perceptions of the parties concerned, it is more intuition-oriented, and at this point, it may be possible that the perceptual differences of the managers create a crisis. While the



perceived crisis defines the situation in the period when the differences in the behavior of the parties are observed, the experienced crisis defines the actual situation (Sucu, 2000: 20).

The most common types of crises in businesses are as follows (Sucu, 2000: 22-23):

- As a result of a top manager who does not have a charismatic personality, the lower-level managers cannot accept himself emerging leadership crisis
- The management of the people who founded the business is left to the professionals
- Correspondence and reporting to avoid oversight. The autonomy crisis that emerged because of the lack of institutionalization
- The audit crisis that emerged because of the growth of the business and the lack of sufficient authority to different units resulting from the expansion of the bureaucratic crisis
- Conflict of interest crisis that arises because of the unit or top manager making decisions based on scientific or personal interests to highlight their own capacity and importance of doing business
- The strategic crisis that arises when the external environment is constantly changing as well as the failure of the management
- The failure of the business to achieve its functional goals or there is a danger that these objectives will not be achieved functional crisis,
- A liquidity crisis that occurs when the business does not have the resources it can use to meet its cash needs. But regardless of the type of crisis, crisis is crisis in terms of management relations. For the manager, the size of the crisis is important, not the type.

If the impending crisis signals are not received, interpreted, and evaluated, and healthy reactions are not given, it is inevitable for the organization to enter a crisis period. Panic and conflict occur within the organization. Managers tend to save the day, goals and plans are ignored. The organizational climate deteriorates. In addition to the centralization of decision-making, the tendency to centralize control also increases and the decision-making process deteriorates. (Tağraf, Arslan, 2003: 152)



Crisis management is the establishment of protection and prevention mechanisms by identifying warning signals to prevent a possible crisis, the elimination of an existing crisis or the determination and implementation of measures that can minimize its damages (<http://www.kobifinans.com.tr>). Crisis management has been defined as a systematic process carried out within the framework of minimizing the losses of its stakeholders by ensuring that the business continues its normal activities (Pearson and Clair, 1998: 63).

The purpose of crisis management is to help the organization recover from crisis or, more effectively, to manage the organization in an effective way that will not fall into crisis. If we consider the development and growth opportunities of crises at the same time, crisis management aims not only to get out of the crisis but also to benefit from the crisis environment. The effectiveness of the crisis management structure allows the incoming crisis to be foreseen and to turn it into an opportunity (Sucu, 2000: 47).

However, when we look at the studies in the current literature, it seems that formal crisis planning is done very little by SMEs (Runyan, 2006: 14). In other words, SMEs do not make long-term plans, do not employ planning experts, and intuition and predictions are considered rather than statistical methods in the plans made by the owner and partners (Erdoğan, 2006: 36-37).

In line with previous studies, the crisis management team first determines what kind of crisis is experienced in the business. As a result of the situation analysis, the name of the crisis is given. The effects of the crisis are determined by the managers. Then, the strategies required to solve the crisis are put into practice. From this point on, the important thing is to control the crisis and ensure recovery. It focuses primarily on solving critical issues. At the previously determined crisis management center, the members of the crisis management team come together to review the strategies and tactics implemented and make the necessary changes immediately. Since crisis management is not a strategic formula, it is put into effect immediately by taking decisions suitable for instant changes (Pearson, 1997: 52).

Crises usually occur in all the components that make up the organizational system. Since the technological subsystem, the structural subsystem, the goals and values subsystem, the psycho-social subsystem and the administrative subsystem are



mutually interactive, the negativity seen in anyone will be reflected to the others to a large extent. A comprehensive crisis assessment needs to examine the managerial priorities associated with each of these systems and their potential impact on each other. It should be known in advance how others will react to a change in any of these systems and to what extent they can adapt to this change (Sucu, 2000: 87).

The management approach adopted by the top management in the organization and how the top management uses its authority have an impact on the motivation and performance of the employees. If the management approach and the way of using authority are not used in a way that will positively affect the motivation and performance of the employees, undesirable situations such as demoralization, restlessness and inefficiency occur within the organization, reducing the commitment of the employees to the organization and creating a crisis threat for the organization. Apart from the top management's understanding of management and the way they use authority, the personal mistakes of managers are also an important crisis threat for organizations. Many crises faced by organizations arise because of personal mistakes, such as decisions made or not made by incompetent and unsuccessful managers, and misapplications (Pira and Sohodol, 2004: 32-33).

Having a crisis-sensitive and viable action is to define the processes necessary to address and evaluate future crises. At the core of this process are appropriate information systems, planning procedures and decision-making techniques.

It is possible to list the techniques used in crisis management as strategic forecasting, probability planning, problem analysis and scenario analysis (Murat, Mısırlı, 2005: 8).

*Strategic Forecasting:* Strategic forecasting, first of all, requires making forecasts for the future. These estimates assume that the organization will adapt to new situations. Today it is possible for managers to predict with precision, but many forecasting techniques that miss surprise events exists. These techniques are qualitative estimation methods, extrapolation, simulation, and cause-effect methods consists of. The essence of these forecasting techniques is to accurately predict and evaluate the impact of large or large changes.

*Probability Planning:* Probability plans are expected alternative that can be substituted in case of failure are plans. While forecasting is based on pre-specified



situations and certain plausible events, contingency plans that an organization prepares are for more specific situations. Airlines often employ administrative and clerical staff in the event of a workers' strike. When imports cease or decrease, companies have alternative plans to purchase from domestic suppliers. Most of the company's strategic decisions are based on the framework established by contingency plans. When interest rates rise unexpectedly, the company may avoid expansion. If the firm is in a dominant position in the market, it can initiate the stock repurchase program.

As can be seen, contingency plans are to some extent based on predictable environmental changes. Obviously, having contingency plans in place helps a company not only protect against crisis but also resolve crisis situations as they arise.

*Problem Analysis:* This approach is more conducive to contingency planning shows similarity. Here, the purpose is the external is to keep the decision makers in the company alert by gradually developing the trends around it. On the other hand, the efforts of the enterprise are aimed at turning the problem into an advantage. For example, the trend to protect the environment has proven that some companies will eventually have to change their production methods, the energy sources they use and the products they manufacture.

*Scenario Analysis:* 'Scenario Analysis' took its place in Modern Risk Management after the implementation of VAR (Value at Risk - Value at Risk) became widespread in Post-1990 Risk Management. This method, which has been applied as Subjective Risk Management since the existence of the Science of Economics, has been tried to gain objectivity with the VAR methodology, and this methodology and scenario analyzes have not lost their popularity despite the failures and losses during the crisis periods and intense criticism. (Alkin, <http://www.turkcebilgi.com>) Scenarios are attempts to describe in detail the outcome of events that can lead to a predetermined final state, or alternatively, to consider the consequences of present choices. Also, a scenario is a hypothetical series of events designed to draw attention to cause-effect processes and decision points. Scenario analysis is used to prevent, facilitate, or prevent positive and negative situations that may arise and the processes that cause these situations, alternatives that the business can put into practice in preventing. It



requires thinking about solutions. It is a technique that can be used especially before the crisis.

*Building a Crisis Management Team:* It is important to create a crisis management team with a clear chain of command during a crisis. The team should meet every six months or more to discuss potential crises and how to respond to them. These teams must be cross-functional to gain input from all parts of the business, identify every possible disaster the company can imagine facing, identify potential crises, and determine how to protect the business from them. A full crisis plan should be prepared for the crises with the highest realization risk for the company. A smaller contingency plan is sufficient for crises with less risk of occurrence.

Management of disaster deals with the management of an organization's resources and responsibilities to control the risk and its impact. Mitigating the disastrous effects by performing in advance certain activities is one of the main purposes of relief organizations. Disaster may appear in different ways such as technical (cyberattacks, nuclear attacks), natural (floods, tsunamis, earthquakes, tornados), environmental (air pollution), epidemiological (disease), and daily hazards (accidents). In the last decades, the whole humanity faced different forms of disasters, crisis or hazards.

Business continuity planning is a methodology used to create and validate a plan for maintaining continuous business operations before, during, and after disasters and disruptive events. This plan has to do with managing the operational elements that allow a business to function normally in order to generate revenues. It is often a concept that is used in evaluating several technology strategies. Banks, which involve high volume online retailers, may decide that the cost for fully redundant systems is a worthwhile investment because the cost of downtime for even five or ten minutes could cost millions of money. Banks require their businesses run continuously, and their overall operational plans reflect this priority. Banks and all institutions have to keep their business ongoing, to maintain the flow of money in the economy. In order to do this, in the present time, many banks adopted digital solutions, they remote their work from physical to online. It is how risk management, in case of disaster, modify the organizational structure and culture.

Disaster recovery plan is part of business continuity and deals with the immediate impact of an event. Disaster recovery usually has several discreet steps in the



planning stages, though those steps confuse quickly during implementation because the situation during a crisis is almost never exactly to plan. Disaster recovery involves stopping the effects of the disaster as quickly as possible and addressing the immediate aftermath. This might include shutting down systems that The role of SMEs in the contribution to economic development in any nation is acknowledged worldwide. However, due to their establishment, disaster can potentially and significantly affect SMEs sustainability in terms of performance and productivity, whether directly or indirectly. Specifically, floods disaster is one of the most common disaster which could cause various degrees of properties lost and damages of equipment, installation, building, business stock, etc. This is notwithstanding the extent of loss of businesses during closure of premise during and after the flood due to long term recovery. It has been generally attributed that most SMEs lack preparedness and were always caught unaware. On top of that, the complex nature of preparedness has also put SMEs in adverse position due to limited knowledge, resources, and workforce for proper and adequate disaster planning and preparedness. have been breached, evaluating which systems are impacted by a flood or earthquake, and determining the best way to proceed.



### **3. AN APPLICATION ON THE ASSESSMENT OF EMERGENCY PREPARATIONS OF SMALL AND MEDIUM ENTERPRISES RESIDENT IN KONYA:**

#### **3.1. Purpose of the research**

The main purpose of the research is to find answers to the questions of the type, characteristics and level of these studies if they are institutionalizing the risk management of small and medium-sized enterprises operating in Konya in the face of both national and international crises that have become chronic.

#### **3.2. Scope and Limitation of the Research**

The definition of SME (enterprises employing 1-9 workers is very small enterprise, enterprises employing 10 to 49 workers are small and enterprises employing 50-199 workers are medium-sized enterprises). The assumption that the managers who are the source of the research perceive the survey questions correctly and give correct answers can be seen as the important limitations of the research.

#### **3.3. Method Used in the Research**

In order to better understand the situation in the field research method in the collection of data, first the qualitative research (face-to-face interview) technique was used, and then the quantitative research (survey) technique was used.

During the face-to-face interviews with the managers of five businesses, 11 questions were asked to them, and one business manager did not answer the questions for a reason he did not specify.

Within the scope of the first part of the research, the answers of the managers according to the interview questions are included. One in five SME managers did not want to answer the questions.



Table.1: What do you understand by risk management?

<b>SME</b>	<b>MANAGER'S ANSWER</b>
1	No financial deficit
2	We do not have a special risk management
3	Problems on high-tech devices
4	We do not have a special risk management

Table.2: What do you understand by disaster management?

<b>SME</b>	<b>MANAGER'S ANSWER</b>
1	Precautions to be taken in any unexpected situation
2	Occupational health and safety studies
3	Required for staff
4	Precautions to be taken in any unexpected situation

Table.3: What are the financial risks affecting your organization?

<b>SME</b>	<b>MANAGER'S ANSWER</b>
1	Exchange rate, labor force
2	Interest, exchange rate, price change in imported products
3	Interest, exchange rate, price change in imported products
4	Interest, exchange rate, price change in imported products

Table.4: What do you do to protect yourself from financial risks affecting your institution?

<b>SME</b>	<b>MANAGER'S ANSWER</b>
1	Keeps some cash in the safe
2	It tries to buy foreign currency in advance, it works with stocks, it buys wholesale goods in advance
3	There is not much financial risk as it works with foreign exchange.
4	Interest, exchange rate, price change in imported products



Table.5: What are the physical risks affecting your organization?

<b>SME</b>	<b>MANAGER'S ANSWER</b>
1	Agriculture sector, weather conditions
2	Cash amount
3	Failure to export
4	Cash amount

Table.6: What do you do to protect yourself from physical risks affecting your organization?

<b>SME</b>	<b>MANAGER'S ANSWER</b>
1	We are trying to find new markets
2	To consult the situation among themselves and with the leaders of the sector
3	There is enough liquid money to manage the crisis for a year.
4	We are trying to find new markets

Table.7: What are the risks affecting the information of your organization?

<b>SME</b>	<b>MANAGER'S ANSWER</b>
1	Internet
2	There is a remote connection program
3	Everything is backed up
4	Internet

Table.8: What do you do to protect yourself from information risks affecting your organization?

<b>SME</b>	<b>MANAGER'S ANSWER</b>
1	Information Technologies department provides support
2	Generator
3	Every need of the staff is tried to be met
4	There are different subscriptions



Table.9: What are the risks affecting your employees?

SME	MANAGER'S ANSWER
1	Disease, pandemic
2	Employees need to be qualified
3	Disease
4	Disease

Table.10: What do you do to protect yourself from risks affecting employees?

SME	MANAGER'S ANSWER
1	Masks were distributed three times a day during the pandemic, disinfectant was kept at certain points, two people were seated at the dinner tables.
2	Employees are relocated, working with an extra 10% capacity staff
3	Staff are made to feel valuable, necessary precautions are taken during the pandemic
4	Masks are worn during the pandemic; disinfectant is put in certain places

Table.11: Have you heard of the ISO 31000 standard? What work do you have on this subject?

SME	MANAGER'S ANSWER
1	I don't know
2	I've heard of the ISO 31000 standard, but no attempt has been made
3	There has been no need for ISO so far. They are accredited through TÜRKAK 17020
4	I don't know

According to these interviews, I have observed that companies do not take precautions in accordance with the standards in the fields of risk management, crisis management and disaster management in emergencies, and they do not have a professional organization for the case of emergency.



## 4. RESULTS AND FINDINGS:

The survey had 17 questions about the decision-making behavior regarding risk and managing it. The answers, their averages, and their deviations are listed in the table below:

4.1.Table12

Number	Question	Mean	Std.
Q1	We determined the situations that are likely to affect our company (we put them out in articles and put them in writing).	4,737589	0,4415135
Q2	We have determined the probability of occurrence of these situations that are likely to affect our company (in percentage numbers) as estimations.	4,723404	0,4645487
Q3	We have calculated the monetary effects and consequences of these situations that are likely to affect our company.	4,730496	0,4610459
Q4	We calculate the monetary effects of very rapid changes (increase/decrease) of financial variables (interest, exchange rate, etc.) on our company.	4,737589	0,4574056
Q5	We calculate the monetary effects of very rapid changes (increase/decrease) in input (raw material, energy, equipment) prices on our company.	4,751773	0,4335242
Q6	We calculate the monetary effects of the very rapid changes (increase/decrease) in the prices of the products we produce on our company.	4,742857	0,4386282
Q7	We calculate the monetary effects of adverse natural events (snowfall, harsh winter, hail, flood, heat wave, etc.) on our company.	4,319149	0,7494679
Q8	We calculate the financial effects of hacking our computers (theft, deletion of information, etc.) on our company.	4,269504	0,827038
Q9	We calculate the financial effects of long-term computer failures (hardware, internet, etc.) on our company.	4,333333	0,8251984
Q10	We calculate the financial effects of events (pandemic, strike, etc.) that will affect most of our employees on our company.	4,41844	0,8120171
Q11	We plan how we should act against very rapid changes (increase/decrease) of financial variables (interest, exchange rate).	4,77305	0,4203535
Q12	We plan how we should behave in case of rapid change (increase/decrease) in input (raw material, energy, equipment) prices.	4,780142	0,4156269
Q13	We plan how we should act against the very rapid change (increase/decrease) in the prices of the products we produce.	4,765957	0,4249084
Q14	We plan how we should act against adverse natural events (snowfall, harsh winter, hail, flood, heat wave, etc.)	4,269504	0,791738
Q15	We plan how we should act against hacking (theft, deletion, etc.) of our computers.	4,326241	0,8150062



Q16	We plan how we should behave in case of long-term computer failures (hardware, internet, etc.).	4,342857	0,8203476
Q17	We plan how we should act in the face of events (pandemic, strike, etc.) that will affect most of the employees.	4,407143	0,7856302

Although the averages are all above 4 the answers to the questions seem to have formed two clusters: one is centered around slightly above the 4,7 mark (and having lower standard deviations), other is 4,2-4,4 range (with higher standard deviations). Since the top mark is 5, having a closer value will make the standard deviation for the first cluster to be less than that of the second cluster.

The first cluster includes questions 1-6 and 11-13. These questions are about general risk management, financial risks, and input and product prices. The questions on natural event risks, IT-related risks, and labor-related risks, as a group have slight but noticeably lower values. This might be due to managers' perceptions being more tuned to financial variables than other types of variables. Since the majority of the respondents were senior managers and owners, it is normal for the biased to be biased towards their priorities. Another explanation is that managers want to convey a message that they are ready for financial risks as they put more importance on them compared to other types of risks. Whichever the explanation might be financial risks seem to have higher importance from managers' perspective. It is interesting though; the survey was conducted right after the pandemic and the perception of pandemics hasn't risen to the same level as financial risks. It may also be the case that there were initially no thoughts of a pandemic earlier and now it is considered among the existing risks. Since the survey does not take the changes in risk perception over time, it would be impossible to know.

Question 18 measures how firms weigh the risks. The distribution of the answers are shown in the following table.

Q18	We take our measures against situations that may affect our company financially as follows:	Frequency	Percentage
a)	According to the largest expected monetary impact.	21	15,00%
b)	According to the most likely to occur.	79	56,46%
c)	By multiplying the monetary value of the probability and the effect, according to the result.	40	28,57%
d)	By looking at the consequences after the event has taken place.	0	0%
	TOTAL	140	100%



Based on theoretical grounds one is expected to answer the question as ‘c,’ the expected value of the potential loss. Answer ‘a’ misses the likelihood of an event that even if the monetary impact is high if the chances are very low then one might overlook the event. Answer ‘b’ on the other hand does not take the magnitude of the event into consideration. Even if an event is very likely to occur, if the impact is low then one handle it as part of regular operations or totally ignore it. The option has a relative frequency of 58%. Even though it was given as an option, almost only a quarter of the respondents (28%) picked the expected value as their prime decision criterion. One possible explanation for picking ‘b’ over ‘a’ might be the knowledge of some variation of the Pareto Rule which prioritizes events not based on their economic or financial effects but rather on their frequencies of occurrences.

The next questions (19-24) were about identifying the firm. Survey question 19 was especially flawed as the responses were open-ended and it was hard to categorize the answers. A more correct version of the question could have been that answers are selected from a list of options.

Question 20, the number of employees, gave us a measure of the size of the company. Question 21 was on whether the company was a family-run business or not. The revenues, imports, and exports were quizzed by questions 22 through 24. Most of the respondents refrained from answering them on the basis that the information was confidential. Thus, it will not be possible to get meaningful results in relation to revenues.

The data is distributed quite evenly for the 1-150 employee range (approximately 25% in each category) and decreases quickly afterward. The distribution of company size is presented in the following table:

Q20	Number of employees in your company		Frequency	Percentage
	1-50		34	24,29%
	51-100		37	26,43%
	101-150		36	25,71%
	151-200		22	15,71%
	201-250		8	5,71%
	251 and above		3	2,14%
	Overall average	110,74	Std. Dev.	94,83



The next question is about ownership. The majority of the businesses surveyed were not family businesses. The question was included to see if there was any relationship between risk management and risk management variables, however, no such meaningful relation was found.

Q21	Is your company a family business?	Frequency	Percentage
	Yes	9	6,52%
	No	129	93,48%
	TOTAL	140	100%

The position/role of the respondent in the company was quizzed in question 25. The results are given in the table below. Most of the respondents were decision-makers.

Q25	Your Position/role in the company	Frequency	Percentage
a)	Owner or general manager	27	19,29%
b)	Senior manager	100	71,43%
c)	Other	13	9,29%
	TOTAL	140	100%

The last questions (26-28) are about the firm's capabilities. Question 26 asks whether the firm employs risk management measures, specifically the ISO 31000 standard. The positive answers make up only a small portion of the responses.

Q26	Do you apply risk management according to ISO 31000 standards?	Frequency	Percentage
	Yes	33	23,91%
	No	105	76,09%
	TOTAL	138	100%

Question 27 is whether the firm has received any support for the projects. This question measures whether the firm is capable of developing projects as well.

Q27	From which of the following institutions have you received support for any project before?	Frequency	Percentage
	European Union (National Agency)	5	3,57%
	KOSGEB (SME Development Agency)	112	80,00%
	Ministry of Industry	125	89,29%

The majority of the firms have undertaken projects supported by KOSGEB and the Ministry of Industry, however, very few were supported internationally.

The last question is about the software used by the firm. It is expected that the more applications the firm uses the more it is aware of technological risks, as well as the firm, is more aware of its operations.



Q28	Which of the following software do you use?*	Frequency	Percentage
	Accounting	138	95,57%
	Inventory Management	5	3,57%
	Production Planning	121	86,43%
	Customer relations management	138	95,57%

It is found that most applications are used by almost all, however, inventory management was used by very few.

Next is the analysis of correlations between variables. The variables used are Q26 (whether ISO 31000 standards are used), Q18 (how risks are weighed), Q21 (business type), Q20 (number of employees), Q27 (project support), and Q 28 (software). The results were obtained by Stata software using pwcorr command. This gave pairwise correlations of the selected variables. The results include the significance levels of the correlations as well (whether they are significant at 5% level). The correlations are listed in the table below.

4.2.Table13

Correlations	Q26	Q18	Q21	Q20	Q27a	Q27b	Q27c	Q28a	Q28b	Q28c	Q28d
Q26 (ISO)	1,0000										
Q18 (perception)	<b>0,2050</b>	1,0000									
Q21 (type)	0,1501	0,0287	1,0000								
Q20 (employees)	0,1154	0,1025	0,0401	1,0000							
Q27a (EU)	<b>0,2549</b>	0,1365	0,0512	0,0682	1,0000						
Q27b (KOSGEB)	<b>0,1984</b>	<b>0,1910</b>	0,0127	0,1014	0,0000	1,0000					
Q27c (Ministry)	0,1321	0,0836	0,0963	<b>0,3099</b>	0,0667	<b>0,1732</b>	1,0000				
Q28a (Accounting)	0,0680	0,0290	0,0320	0,1035	0,0232	0,0602	0,1529	1,0000			
Q28b (Inventory)	0,1640	0,0464	<b>0,4200</b>	0,0435	<b>1,1704</b>	0,0962	0,0578	<b>0,3012</b>	1,0000		
Q28c (Production)	<b>0,1747</b>	<b>0,2279</b>	0,0204	<b>0,3633</b>	0,0361	0,1460	<b>0,4022</b>	<b>0,3038</b>	0,0361	1,0000	
Q28d (CRM)	0,0680	0,0663	0,0320	0,1029	0,0232	0,0602	<b>0,3475</b>	<b>0,4928</b>	0,0232	<b>0,3038</b>	1,0000

The correlation coefficients significant at the 5% level are highlighted. The results show that the following pairs of variables show somewhat positive correlations with reasonable explanations:

- Employing ISO 31000 standards (Q26) and correct assessment of risks (Q18).
- Employing ISO 31000 standards (Q26) and EU projects (Q27a).
- Employing ISO 31000 standards (Q26) and KOSGEB projects (Q27b)



A statistical relation between employing ISO standards and the correct assessment of risks should be expected. The standards require a regular risk assessment, identification, analysis, and evaluation. However, the responses show specifically an incomplete evaluation based on the frequency of the events. A correlation coefficient of 0.2 shows a positive but weak link between the variables.

Taking part in an EU or KOSGEB-supported project shows once again weak but positive correlation coefficients. The ISO-EU correlation coefficient is slightly higher (0.25) than the ISO-KOSGEB (0.20). This may be the result of EU-supported projects having higher standards than KOSGEB.

Using production planning software has positive and once again low correlation coefficients with ISO and correct risk assessment variables (0.17 and 0.23 respectively). The production planning software usage is very high (86%), so to show the relation one must think in reverse: Those who do not use production planning software are less likely to employ ISO 31000 standards and have a correct risk assessment.

Although there are other pairwise correlations marked as statistically meaningful, it would be very hard to make logical ties between variables or relate them to better risk management. Examples include the use of accounting software and the negative relation between the use of inventory software. Such values are obtained simply because most of the firms use accounting software and almost none uses inventory management software. The result is, therefore, a statistically significant negative correlation coefficient but has no significant other logical explanation.



## 5. DISCUSSION

The research was performed in two stages: The first stage consisted of interviews which had open-ended questions with a limited number of subjects. The answers were qualitative, and the questions were aimed to provide information on respondents' perspectives. The answers were analyzed and used to prepare a survey for a larger target. It was initially expected that respondents would be thorough in their answers however typical to the region, they avoided being interviewed in-depth and gave short-cut answers. The answers suggest that the idea of risk and disaster management philosophy is lacking among the interviewees. Most did not hear about the ISO 31000 standards; one even misunderstood the question. Only one claimed to have heard about it. Based on the findings, it was assumed that the majority of the to-be-surveyed firms would lack risk management measures. Based on such presumptions survey questions were prepared. The questions quizzed different aspects of risk management.

The survey was the second stage targeting some 150 responses. An online survey was prepared. Konya Chamber of Commerce was contacted, and member firms have been notified about the survey. After a couple of weeks, there have only been a couple of responses. Then face-to-face surveys were conducted.

The respondents were in general suspicious of the survey. They chose not to answer the financial questions. The responses to the risk management questions surprisingly (or maybe not) had high scores; most answers had scores of 4 or 5 (agree or strongly agree). Although the interviews suggested that the managers would be less likely to implement risk and disaster management measures, the survey answers claim that most firms manage their risks quite well. The responses to the ISO risk management standards question were higher than expected as well (24%) based on the interview answers.

The probability of all four interviewed firms not employing ISO31000 at the same time is about 33% (based on the probability of any firm not employing is 76% as obtained from the survey and 4 firms not employing is  $0.76^4 = 0.33$ ). Since the probability is high, there is no inconsistency between the interviews and the surveys.

On the other hand, it is possible to explain why the answers would have very high scores whereas, the actual risk management capabilities of the firms might be lower.



One possible explanation is unintentional: due to a lack of awareness of risk and disaster management, managers may claim that their firm is ready for risks. The other is intentional: they might be aware of risks and their firm's weaknesses, but they might be unwilling to admit to themselves or reveal it to researchers. In either case, the answers will be biased.

One major factor against improving the quality (in terms of accuracy, reliability, and validity) of the surveys was that every change in the questionnaire required new approval from the ethics committee – which was a long process. Due to time limits, the study missed the opportunity to revise the questionnaire and survey another group of firms. This opens a door for further research.

Meanwhile, there are promising results as well. Receiving government or EU support is correlated to better risk management, and even though correlation does not mean causality, there might be gains from participating in such projects. There are some obvious pathways: simply filling out application forms is educating. The various KOSGEB forms ask the applicants to provide information on their development processes, financials, market research, etc. While filling out such forms, applicants become aware of various management techniques (such as sales and revenue forecasts), identify decision factors related to new product development, and might even get help from advisors. Thus, to increase risk and disaster management awareness the forms can be revised to include questions on identifying risks and measures taken.

Another and more obvious result is that a wider acceptance of ISO31000 standards leads to positive effects on risk management. This can be said maybe without any research, however, the correlation between risk identification and ISO standards becomes obvious with this study.



## REFERENCES

- Ahmet, T. U. N. Ç., & ATICI, F. Z. (2020). Dünyada ve Türkiye’de pandemilerle mücadele: risk ve kriz yönetimi bağlamında bir değerlendirme. *Çanakkale Onsekiz Mart Üniversitesi Uluslararası Sosyal Bilimler Dergisi*, 5(2), 329-362.
- Alkın, R. C. (2021). Bütünleşik Afet Yönetimine Sosyolojik Bakış: Toplumsal Yapı, İşlev ve Temel Kavramlar Işığında Bir Okuma Denemesi. *Medeniyet ve Toplum Dergisi*, 5(1), 18-34.
- Artık, Y., Varol, N., & Cesur, N. P. (2022). Hospital Disaster and Emergency Plan in Biological Disasters (HDEP): Coronavirus (SARS-CoV-2) COVID-19 Pandemic System Model Example. *Journal of Contemporary Studies in Epidemiology and Public Health*, 3(1).
- Aşık, M. (2016). *Turizm işletmelerinde kriz ve kriz yönetimi: Bodrum bölgesi'ndeki beş yıldızlı otel işletmelerine yönelik bir araştırma* (Doctoral dissertation, Necmettin Erbakan University (Turkey)).
- Baba, H., Adachi, I., Takabayashi, H., Nagatomo, N., Nakasone, S., Matsumoto, H., & Shimano, T. (2013). Introductory study on Disaster Risk Assessment and Area Business Continuity Planning in industry agglomerated areas in the ASEAN. *IDRIM Journal*, 3(2), 184-195.
- Büyükkaraciğan, N. (2016). Türkiye’de Yerel Yönetimlerde Kriz ve Afet Yönetim Çalışmalarının Mevzuat Açısından Değerlendirilmesi. *Selçuk Üniversitesi Sosyal ve Teknik Araştırmalar Dergisi*, (12), 195-219.
- Benyon, D., Turner, P., & Turner, S. (2005). *Designing interactive systems: People, activities, contexts, technologies*. Pearson Education.
- Beetham, D. (1991). Max Weber and the legitimacy of the modern state. *Analyse & Kritik*, 13(1), 34-45.
- Bitton, E., & Wittich, W. (2014). Influence of eye position on the Schirmer tear test. *Contact Lens and Anterior Eye*, 37(4), 257-261.
- Buch, K., & Wetzel, D. K. (2001). Analyzing and realigning organizational culture. *Leadership & Organization Development Journal*.
- Cakmakli, C., Demiralp, S., Kalemli Ozcan, S., Yesiltas, S., & Yildirim, M. A. (2020). COVID-19 and emerging markets: An epidemiological model with international production networks and capital flows.
- Clegg, S. R., Rhodes, C., & Kornberger, M. (2007). Desperately seeking legitimacy: Organizational identity and emerging industries. *Organization Studies*, 28(4), 495-513.



- Covello, V. T. (2021). *Communicating in Risk, Crisis, and High Stress Situations: Evidence-Based Strategies and Practice*. John Wiley & Sons
- Covello, V. T. (2011). Risk communication, radiation, and radiological emergencies: strategies, tools, and techniques. *Health physics*, 101(5), 511-530.
- Çitekci, M. (2016). *İşletmelerin kriz yönetiminde halkla ilişkilerle etkileşim* (Master's thesis, İstanbul Gelişim Üniversitesi Sosyal Bilimler Enstitüsü).
- Çiftçi, G. (2015). Turizm işletmelerinde kriz yönetimi uygulamalarının örgütsel öğrenme ve işletme performansı açısından ampirik olarak analizi.
- Emin, Ç. V. Kriz Yönetimi ve TOFA Ara. Gör. Sinan NARDALI
- Enia, J. (2020). Is there an international disaster risk reduction regime? Does it matter? *Progress in Disaster Science*, 7, 100098.
- Ergunay, K., Whitehouse, C. A., & Ozkul, A. (2011). Current status of human arboviral diseases in Turkey. *Vector-Borne and Zoonotic Diseases*, 11(6), 731-741.
- Fisher, G. A., & Chon, K. K. (1989). Durkheim and the social construction of emotions. *Social Psychology Quarterly*, 1-9.
- Gofman, A. (2014). Durkheim's theory of social solidarity and social rules. In *The Palgrave Handbook of Altruism, Morality, and Social Solidarity* (pp. 45-69). Palgrave Macmillan, New York.
- Gözüm, A. G., & Arslan, M. (2017). İşletmelerde Afet Yönetimi: Marmara Ve Ege Bölgelerinde Bulunan Rafineri Ve Petrokimya Endüstrisi Üzerine Karşılaştırmalı Bir Araştırma. *Gazi İktisat ve İşletme Dergisi*, 3(2), 102-116.
- Hatton, T., Grimshaw, E., Vargo, J., & Seville, E. (2016). Lessons from disaster: Creating a business continuity plan that really works. *Journal of business continuity & emergency planning*, 10(1), 84-92.
- Järveläinen, J. (2020). Understanding the stakeholder roles in business continuity management practices—A study in public sector.
- Kandemir, M., & Gümüş, İ. (2021). İşletmelerde Kriz Yönetimi ve COVID-19 Pandemi Sürecine İlişkin Bir Değerlendirme: Eti Maden İşletmeleri Genel Müdürlüğü Örneği. *Journal of Organizational Behavior Review*, 3(2), 153-184.
- Kadıoğlu, A. (2008). Vatandaşlığın dönüşümü: Üyelikten haklara. *Metis Yayıncılık. İstanbul*.



- Kaya, B. E. (2020). *Urban Policies and Critical Analysis of Urban Transformation in İzmir: Yeşildere Case* (Doctoral dissertation, Izmir Institute of Technology (Turkey)).
- Kash, T. J., & Darling, J. R. (1998). Crisis management: prevention, diagnosis and internetin. *Leadership & organization development journal*.
- Kirikkaya, E. B., Çakin, O., Imali, B., & Bozkurt, E. (2011). Earthquake training is gaining importance: the views of 4th and 5th year students on Earthquake. *Procedia-Social and Behavioral Sciences*, 15, 2305-2313.
- Kızılova, Ö. (2014). *Afet odaklı kriz yönetimi: AFAD örneği* (Master's thesis, İnönü Üniversitesi Sosyal Bilimler Enstitüsü).
- Koczanowski, J., Migdal, W., Klocek, C., & Tuz, R. (2001). The effects on growth rate during two fattening periods on carcass quality of fattening pigs fed ad libitum. *Annals of Animal Science. Supplement*, (1).
- Kruger, H. M., Meaton, J., & Williams, A. (2020). Pandemic continuity planning: Will coronavirus test local authority business continuity plans? A case study of a local authority in the north of England. *Emergency Management Review*, 4(1), 4-27.
- Meder, M. (2001). Bilgi toplumu ve toplumsal değişim. *Pamukkale Üniversitesi Eğitim Fakültesi Dergisi*, 9(9), 72-81.
- Merton, R., & Huntington, J. (1999, February). Early simulation results of the ARIES-1 satellite sensor for multi-temporal vegetation research derived from AVIRIS. In *Proceedings of the eighth annual JPL airborne earth science workshop, Pasadena, CA, USA* (pp. 9-11).
- Lindenmayer, D. B., & Fischer, J. (2013). *Habitat fragmentation and landscape change: an ecological and conservation synthesis*. Island Press.
- Ogie, R. I., & Verstaavel, N. (2020). Disaster informatics: An overview. *Progress in Disaster Science*, 7, 100111
- Okay, İ. (2019). Küreselleşen dünyada kriz yönetiminin önemi. *Avrasya Sosyal ve Ekonomi Araştırmaları Dergisi*, 6(3), 308-317.
- Ono, T., & Watanabe, K. (2017). Area business continuity management approach to build sustainable communities. *Journal of Disaster Research*, 12(4), 806-810.
- Omer, S. B., Yildirim, I., & Forman, H. P. (2020). Herd immunity and implications for SARS-CoV-2 control. *Jama*, 324(20), 2095-2096.
- Ono, T., & Watanabe, K. (2017). Area business continuity management approach to build sustainable communities. *Journal of Disaster Research*, 12(4), 806-810.



- Parsons, T. (1935). Sociological elements in economic thought: II. The analytical factor view. *The Quarterly Journal of Economics*, 49(4), 646-667.
- Qamsane, Y., Chen, C. Y., Balta, E. C., Kao, B. C., Mohan, S., Moyne, J., ... & Barton, K. (2019, August). A unified digital twin framework for real-time monitoring and evaluation of smart manufacturing systems. In *2019 IEEE 15th international conference on automation science and engineering (CASE)* (pp. 1394-1401). IEEE.
- Rezaei Soufi, H., Torabi, S. A., & Sahebjamnia, N. (2019). Developing a novel quantitative framework for business continuity planning. *International Journal of Production Research*, 57(3), 779-800.
- Ritzer, G. (1975). Professionalization, bureaucratization and rationalization: The views of Max Weber. *Social Forces*, 53(4), 627-634.
- Sims, N. C., England, J. R., Newnham, G. J., Alexander, S., Green, C., Minelli, S., & Held, A. (2019). Developing good practice guidance for estimating land degradation in the context of the United Nations Sustainable Development Goals. *Environmental Science & Policy*, 92, 349-355.
- Swingewood, A. (1991). Critique of Positivism: I Durkheim. In *A Short History of Sociological Thought* (pp. 97-127). Palgrave, London.
- Swingewood, A. (1998). Problems of Culture Industry. In *Cultural Theory and the Problem of Modernity* (pp. 37-52). Palgrave, London.
- Tekin, M., Zerenler, M., & Bilge, A. (2005). Bilişim teknolojileri kullanımının işletme performansına etkileri: lojistik sektöründe bir uygulama. *İstanbul Ticaret Üniversitesi Fen Bilimleri Dergisi*, 4(8), 115-129.
- Wang, J. L., Muller, H. G., Capra, W. B., & Carey, J. R. (1994). Rates of mortality in populations of *Caenorhabditis elegans*. *Science*, 266(5186), 827-828.



## APPENDIX: ONLINE QUESTIONNAIRE FORM

29.06.2022 20:47

KOBİ'lerde Risk Yönetimi Bilgi Anketi

### KOBİ'lerde Risk Yönetimi Bilgi Anketi

İlerleme durumunu kaydetmek için [Google'da oturum açın](#) [Daha fazla bilgi](#)

\* Gerekli

#### Hakkında - Amaç

Bu anket Konya Gıda ve Tarım Üniversitesi Sosyal Bilimler Enstitüsü Yüksek Lisans Öğrencisi Şeyda BAFRA ve Dr. Öğr. Üyesi Faruk KARAMAN tarafından yürütülmektedir. Bu araştırma anketi ile hedeflenen, Konya'daki küçük ve orta ölçekli işletmelerin risk yönetimi düzeylerini belirlemek ve risk yönetimi faaliyetlerine etki eden faktörleri ortaya çıkarmaktır. Bu anketle ilgili soru ve önerilerinizi b\*\*\*\*.s\*\*\*\*@g\*\*\*\*.c\*\* adresinden bize iletebilirsiniz.

#### Gizlilik

Bu anketi cevaplarken lütfen adınızı soyadınızı herhangi bir yere yazmayınız. Bu anket çalışması ile elde edilen veriler gizli tutulacak ve hiçbir kişi/kurum ile paylaşılmayacaktır. Anket kapsamında toplanan veriler yalnızca analizlerde bilimsel amaçlar için kullanılacak ve araştırma tamamlandığında imha. edilecektir.

#### Gönüllülük

Bu anketin cevaplandırılması tamamen gönüllülük esasına dayanmakta olup, katılımcılar anketteki soruların belli bir kısmını ya da tamamını yanıtlamaktan kaçınabilirler.

Bu bilimsel araştırmaya yaptığınız katkılardan dolayı şimdiden teşekkür eder, işlerinizde başarılar dileriz.

#### Katılımcı İzin Formu \*

- ☐ Bu ankete gönüllü olarak katıldığımı beyan ederim.
- ☐ Bu anketle şahsımdan toplanan verilerin bilimsel amaçlarla kullanılmasına izin veriyorum.



[https://docs.google.com/forms/d/e/1FAIpQLScjvnt-wSiqpy6vVQ3YakSMO\\_RTh-NsyWZWlyb9VanRe3Rlg/viewform](https://docs.google.com/forms/d/e/1FAIpQLScjvnt-wSiqpy6vVQ3YakSMO_RTh-NsyWZWlyb9VanRe3Rlg/viewform)

1/7



Lütfen aşağıdaki ifadelere katılım düzeyinizi 1, "kesinlikle katılmıyorum" ve 5, "kesinlikle katılıyorum" olmak üzere 1'den 5'e kadar belirtiniz.

	1- Kesinlikle katılmıyorum	2- Katılmıyorum	3- Kararsızım	4- Katılıyorum	5- Kesinlikle katılıyorum
Şirketimizi etkilemesi muhtemel durumların neler olduklarını belirledik (maddeler halinde çıkardık ve yazılı hale getirdik).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Şirketimizi etkilemesi muhtemel bu durumların gerçekleşme olasılıklarını (yüzde rakamsal) tahminler halinde belirledik.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Şirketimizi etkilemesi muhtemel bu durumların parasal etkilerini ve sonuçlarını hesapladık.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Finansal değişkenlerin (faiz, döviz kuru vb) çok hızlı değişmesinin (artması/azalmasına) şirketimize olan parasal etkilerini hesaplarız.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Girdi (hammadde, enerji, araç gereç) fiyatlarının çok hızlı değişmesinin (artması/azalmasına) şirketimize olan parasal etkilerini hesaplarız.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



Ürettiğimiz ürünlerin fiyatlarının çok hızlı değişmesinin (artması/azalmasına) şirketimize olan parasal etkilerini hesaplarız.

☐ ☐ ☐ ☐ ☐

Olumsuz doğa olaylarının (kar yağışı, sert kış, dolu, sel, sıcak dalgası, vb) şirketimize olan parasal etkilerini hesaplarız.

☐ ☐ ☐ ☐ ☐

Bilgisayarlarımızın hacklenmesinin (bilgilerin çalınması, silinmesi, vb) şirketimize olan parasal etkilerini hesaplarız.

☐ ☐ ☐ ☐ ☐

Uzun süreli bilgisayar arızalarının (donanım, internet, vb) şirketimize olan parasal etkilerini hesaplarız.

☐ ☐ ☐ ☐ ☐

Çalışanların çoğunu etkileyecek olayların (pandemi, grev, vb) şirketimize olan parasal etkilerini hesaplarız.

☐ ☐ ☐ ☐ ☐

Finansal değişkenlerin (faiz, döviz kuru) çok hızlı değişmesine (artması/azalmasına) karşı nasıl davranmamız gerektiğini planlarız.

☐ ☐ ☐ ☐ ☐


Girdi (hammadde, enerji, araç gereç)

☐ ☐ ☐ ☐ ☐



fiyatlarının çok hızlı  
değişmesine  
(artması/azalmasına)  
karşı nasıl  
davranmamız  
gerektiğini planlarız

Ürettiğimiz ürünlerin  
fiyatlarının çok hızlı  
değişmesine  
(artması/azalmasına)  
karşı nasıl  
davranmamız  
gerektiğini planlarız

Olumsuz doğa  
olaylarının (kar yağışı,  
sert kış, dolu, sel,  
sıcak dalgası, vb)  
karşı nasıl  
davranmamız  
gerektiğini planlarız

Bilgisayarlarımızın  
hacklenmesine  
(bilgilerin çalınması,  
silinmesi, vb) karşı  
nasıl davranmamız  
gerektiğini planlarız

Uzun süreli bilgisayar  
arızalarına (donanım,  
internet, vb) karşı  
nasıl davranmamız  
gerektiğini planlarız.

Çalışanların çoğunu  
etkileyecek olayların  
(pandemi, grev, vb)  
karşı nasıl  
davranmamız  
gerektiğini planlarız.

☐ ☐ ☐ ☐ ☐

☐ ☐ ☐ ☐ ☐

☐ ☐ ☐ ☐ ☐

☐ ☐ ☐ ☐ ☐

☐ ☐ ☐ ☐ ☐





Şirketimizi parasal olarak etkilemesi muhtemel durumlara karşı tedbirlerimizi aşağıdaki gibi alırsınız:

- ☐ a) Beklenen parasal etkisi en büyük olana göre.
- ☐ b) Gerçekleşme olasılığı en yüksek olana göre.
- ☐ c) Olasılık ile etkinin parasal değerini çarpıp sonucuna göre.
- ☐ d) Olay gerçekleştikten sonra sonuçlarına bakarak.

Şirketinizin faaliyet gösterdiği sektör

Yanıtınız

Şirketinizdeki çalışan sayısı

Yanıtınız

Şirketiniz bir aile şirketi midir?

- ☐ Evet
- ☐ Hayır

2021 yılı cironuz ne kadardır?

Yanıtınız





2021 yılı ihracat tutarınız nedir?

Yanıtınız

2021 yılı ithalat tutarınız nedir?

Yanıtınız

Şirketteki göreviniz

- ☐ Sahibi veya Genel Müdür
- ☐ Üst Düzey Yönetici
- ☐ Diğer

ISO 31000 standartlarına göre risk yönetimi uyguluyor musunuz?

- ☐ Evet
- ☐ Hayır

Daha önce herhangi bir proje için aşağıdaki kurumların hangilerinden destek aldınız? \*

- ☐ Avrupa Birliği (Ulusal Ajans)
- ☐ KOSGEB
- ☐ Sanayi Bakanlığı





Aşağıdaki yazılımlardan hangilerini kullanıyorsunuz? \*

- ☐ Muhasebe
- ☐ Envanter Yönetimi
- ☐ Üretim Planlama
- ☐ Müşteri İlişkileri Yönetimi

Gönder

Formu temizle

Google Formlar üzerinden asla şifre göndermeyin.

Bu içerik Google tarafından oluşturulmamış veya onaylanmamıştır. [Kötüye Kullanımı Bildirme](#) - [Hizmet Şartları](#) - [Gizlilik Politikası](#)

Google Formlar



[https://docs.google.com/forms/d/e/1FAIpQLScjvnt-wSiqpy6vVQ3YakSMO\\_RTh-NsyWZWlyb9VanRe3RIg/viewform](https://docs.google.com/forms/d/e/1FAIpQLScjvnt-wSiqpy6vVQ3YakSMO_RTh-NsyWZWlyb9VanRe3RIg/viewform)

7/7



## CURRICULUM VITAE

Ş\*\*\*a B\*\*\*A was born in 1\*\*4, A\*\*\*\*a. She received the high school deegre from Ankara Çankaya High School Mathematics Department in 1\*\*3. She graduated from Middle East Technical University, Department of Sociology in 1\*\*8. Bachelor's specialization is “*Organizational Sociology/Industrial Organizational Psychology*” Ş\*\*\*a B\*\*\*A, who worked in World Bank, European Union, TÜBİTAK, Civil Society Organizations Projects as a “*Project Assistant*”, she served as a consultant in the Turkish Grand National Assembly for sociological research and reports.

